

IT professionals totally immersed

PAGE 39

### Oracle Still Faces Questions From PeopleSoft Users

Some say it hasn't provided a clear road map for apps

Thirteen months after Oracle Corp. took over rival Prople-Soft Inc., the company's product road map appears to be its Achilles' heel among some of the customers it inherited. In January 2005 Oracle clinched its \$10.3 billion buyout of PeopleSoft much to the treoidation of the latter's

installed base. Asked how they feel now seven of 12 former PeopleSoft custom ers interviewed over the past two weeks said they are neutral or positive about Oracle's handling of the morner But cut"on Eurion said Mark

There are still many questions that have vet to be answered

five users said they remain wary of Oracle's plan for implementing Eusian a paytgeneration suite of applications that will combine elements of all the company's current products. "I think the lary is still

Scherer, IT manager at Flariron Construction Corp. in Longmont, Colo Flatiron runs the World green-screen applications that PeopleSoft acquired when a bought I D Edwards & Co. before being purchased by Oracle

"Is the Fusion architecture a fit for us, or do use need to start looking of Ties 2 EMP vendors in the not-to-distant future?" Schener wondered At the same time, he said with his company lessing

that Oracle has worked well him positive about Flatinin's Fusion, page 50

### Vendors Vow to Help Users Manage Mixed Web Services

New tools, links between rival registries on tap

---Users grappling with the proliferation of Web partices are demanding help in creating and enforcing policies to manage them, and uncoming vendor moves indicate that some relief is on the way.

Within the next two weeks for example, SOA Software Inc. is expected to announce that it and other vendors have agreed to support Version 3 of the Universal Description, Discovery and Integration standard, which will let their now-proprietary service regisreins work roughton In addition Software AG in Dormstadt, Germany, this week will unveil a suite of three products with a core

registry and repository tool that focuses on managing the metadata of Web services within a service-oriented architecture and creating policies for their use.

That was ti Efforts like these tanget users such as Christopher Crowhurst, vice president and principal architect at Thomson Learning, a professional and academic testing company in Stamford, Conn

Crowhurst said he spends 10% to 15% of his time each week working to create an en-Web Services, page 50

### Users: PLM Apps Lack Security

The spread of product life cycle manage

e slowed by crucial ignet

ssage from PLM users atmg Derutech 006 here last week

Michael Boldt, enri

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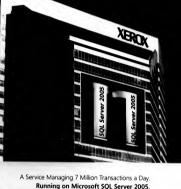
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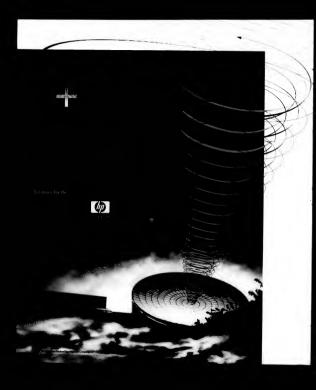




Running on Microsoft SQL Server 2005.







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Central Intelligence

cology section: Consolidated business intelligence suites make sense for large organizations, say IT professionals like lorge Basto of the Georgia Administration Office of the Courts, But adoption has been slowed by users' comfort with their current RI point tools. Page 27

**Drilling Down** 

In the Management section: Valero Energy has combined business intelligence technology and market prescience to become a profit leader in the oil industry. Page 42

### NEWS

Product choices for WAN optimization grow as ES Networks announces a software upgrade that supports the CIFS protocol

Dell loses a \$700 million IT tronics, which decided that a plan to create a single deskton environment worldwide wouldn't most

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### TECHNOLOGY

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34 Socurity Manager's Journal: V-Zero-Day Infection is Headed Off Efficiently, Mathias Thurman's team focuses on eradication a virus but is frustrated by a slow response from the antivirus

### vendor - several hours is a long time in a zero-day attack. MANAGEMENT

39 IT Moves in - With the Business Top IT execs are putting their staffers to work alongside their business counterparts to develop a better understanding of problems and deliver better products.

Managers' Forum. Paul Glen has advice for project managers tired of taking the heat for Incging colleagues and unreasonable project schedules. Also, he discusses whether a manager really needs a technical understanding of what his people do.

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position's potential

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Network Policy Roet Practices **RETWORKING:** How should you go about devising and implementing a network

acceptable-use policy? Sandra Gittlen clues you in as she introduces a new column devoted to best practices in networking.

O Onicklish #8070

**Nokia Tablet: Smart and Sleek** MORE FAMILY FOR The explick Notice 720 Internet Tablet provides easy wireless access to e-mail and the Internet. But it may not be ready for enterprise users. since it's not overflowing with business applications. ( QuickLink #8050

### Health Care Collides With the Enterprise

**RETWORKING:** The president's national coordinator for health IT envisions a national data petwork to improve health care. But users in the trenches have some tough questions, says columnist Bert Latamore, C Quicklink appen

### Virtualization 101 OPERATING SYSTEMS: Red Hat engineer Brian

Stein explains three different types of implementation and discusses the pros and cons of each. () Quicklink appea

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### U.S. Judge Delay

BlackBerry Decision A federal judge stopped short of production a should some of Ottools rry wireless e-mail devices in the U.S. after a court heari on Friday, but he reiterated that ndor Research in Motion Ltd has infringed patents held by cer also said he is shaptical of RMF a claim that a BlackBerry shutdown would hobble critical

lic services. He said he will

ide on NTP's request for an

Court Denies Execu

umissal Motion A U.S. District Court ludge has sied a motion to diss ction of justice cha ent former CA Inc. CEO San jay Kumar and Stophon Richard other former executive at CA. the two are accused of fraudulent accounting practices, inch alsely reporting hundred ons of delians in revenue

Microsoft Says That Korean Fine Is Unfair The South Korea Fair Trade ion's December doc

en to fine Microsoft Corp. and order it to offer two different one of Windows is not supted by facts and will have "a re effect on Korean coners and Korean inner ny said. Microsoft is appealing the commission's for 33 billion won (\$34 million U.S.) and the Windows order. ion's fine

CardSystems Makes **Breach Settlement** stems Solutions Inc. her reed to a settle U.S. Federal Trade Com which alleged that the or by allowing a hacker to ac as meny as 40 million credi card numbers. The set unit of Pay By Touch Inc., to opt stricter sec

### Competition Grows Among WAN Optimization Vendors

F5 adds upgrade of acquired software support for CIFS

BY MATT HAMPI FO THE PRODUCT choices coorings to expand for users seeking devices that can boost the performance of file sharing via the Common Internet File System (CIFS) protocol F5 Networks Inc. today plans to announce a software

uperade that includes CIES acceleration capabilities for its line of WAN optimization appliances. The added feature should vastly reduce the latency involved in transferring Windows-based files, triellner or even quadrupline the transfer speeds provided by the WANJet appliances, said Amost Dhillon, director of

product management at F5. The Scattle-based company acquired the WANtet line when it bought Swan Labs Inc. last September, Due March 15 the WANJet 4.0 upgrade will be the first version of Swan's software that is integrated with ment products at the userinterface level. Dhillon said a growing list of yenders of (WAFS) products that can replace file servers in branch

compliance numoses Navio Systems Inc., a vendor of digital rights management software in Cupertino Calif. has been beta-testing WANIer 4.0 and plans to deploy the software on two appliances in the next 45 days. The devices will support operations in Europe and Asia and may also be used to replace conventional

file servers at various locations globally, said Will Lee director of operations at Navio. Navio currently uses WAN-Jet 3.0 for large data backups across a dedicated Tilling in the San Franciso area. After the company installed the technology, backup times were reduced from three days to five hours Lee said Ma add ed that the CIFS acceleration

is expected to improve enough

Analysts said F5 is joining fering wide-area file services offices and beln communion

back up data for regulatory

ne State at \$1.795 cm

Mary WAN Let 4 D in due to ship March 15

on slobal connections \*CIFS is an incredibly charty protocol," said Joe Skorupa.

an analyst at Gartney Inc. Skorum said there can be hundreds of CIES temperations running back and forth across a network at the same time. They may take I msec each on a LAN but 200 msec over a WAN, he noted.

Skorupa predicted that ome companies will use WAFS technology to completely eliminate file servery

The cancellation of the pact

was mutually agreed upon by

both companies" a year after

Dell began providing hard-

ware and services to Philips.

said Bob Kaufman, a spokes-

Dell was awarded the five

man for the IT vendor

in their branch offices, in some cases rinning out thousands of systems and replacing them with appliances like WANlet. "There will be very large implementations," he said

TECHNOLOGY OFTAN 5 But Skorum added that IT managers need to eneed as much time as possible evaluat ing the management functions in WAN acceleration products

before installing them "Once (they're) in the net work you'll be completely dependent on them." he said "If one) fails was pred to know what the implications are to the business processes."

Riverbed Technology Inc. is the leading worder of CIES acceleration appliances, according to Skorupa and Joel Conover, an analyst at Curnent Analysis Inc. in Sterline Vs. But Riverhed has plenty of competition. Like FS, both

Cisco Systems Inc. and Juniper Networks Inc. have entered the market through acquisitions over the past two years. Orbital Data Corp. added CIFS support to its WAN appliances in November, follow ing a similar move by Expand Networks Inc. last August.

MORE WAFS NEWS

WAFS technology to replace type for data backups at its branch officers. Page 20

networks and applications. and provide technical assistance for 75,000 employees at Philips in December 2004 Dell has been looking to boost its services business outside North America in recent

years to beln offset a slowdown in the growth of its core hardware business The conclusion by Philips officials that the one-size-fits-

all desktop strategy wouldn't work is upderstandable, said Charles King, an analyst at Pund-IT Inc. in Hayward. Calif

"Their reasoning sounds valid," he said, as company officials realized that busine units in different countries likely have different needs a

Montalbano is a reporter for the IDG News Service

### Dell. Philips Cancel IT Deal Worth \$700M should proceed in providing desktop services to its users

Dell Inc. last week confirmed it has lost an IT services deal with Phillips Electronics NV that was valued at up to \$700. million over five years

The Dell contract for a project called Global Workplace was canceled after Philips determined that its soul of creating a centralized deskton environment for its worldwide workforce was unfeasible, said Jason Otke, a spokesman for Amsterdam-based Philips.

Through the development work, it was concluded that the elobal one-size-fits-all strategy was not the ideal approach," Otke said, "The lesson from this is that we need to reflect the regional

He said the decision was made after a review of the project by both companies to find out whether it could adequately support end users. Ultimately, there were more questions than answers about what approach would work worldwide, he said, adding

that Philips officials now are year contract to manage deskevaluating how the company top computers, printers, office It was concluded that the global one-size-fits-all strategy was not the ideal approach. The lesson from this is that we need to reflect

the regional needs of our businesses

JASON OTKE, SPOKESMAN FRANCISCH "...



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PC Maker Files Suit painst Microsoft Tangent Computer Inc. has filed a civil suit in U.S. feeter

rt accuring Microsoft Corn tion antitrust four The s. Calif.-hased mak tred PCs alleges that oft employs practices. "te while charging "arti ted prices" for its set roult charges that the tactics violate the Sherman Ar trans &as

SCO Group Shuffles Management Duties
The SCO Group Inc. has re-

Auffled the respons Dies of the management ranks. President and CEO Dari McBride will now ous on SCO's strategy and vision while passing on day to day shifties for the comny's operating units to Tim pris. the former vice presi of sales. Negris was promoted to we vice president of sale

dicron Files I awayii Against Rambus

up its legal battle with Ray Inc., filing a lawrest last wee that accuses the chip tecl or of violating U.S. orga ed crime laws. The la es a month after a De owed Rambus to re with an ongoing pat est Spermit acco

fice Buys VPN

### C ON THE MARK



### Evidence-based IT Improves a . . .

... team's odds for a project's success. Nothing sounds more obvious than nailing down the pertinent facts before venturing into an IT project. Yet it happens less often than you'd think, according to Stanford University professors Jeffrey Pfeffer and Robert L Sutton.

authors of Hard Facts, Danger ous Half-Truths & Total Nonsense: Profitine From Evidence Based Manage ment, to be

published nev month by Harvard Rusiness School Press. The book is checkablock with examples of corporate executives running amok with fixed ideas about how the world ought to be as opposed to how it is. You'd think the bits-and-bytes reality of IT would be exempt. but you'd be wrong, says coauthor Sutton. \*IT is incredibly ideological," he says, noting the hard-core beliefs some

an era of distributed development teams, if you have a suc-IT managers have about say Linux vs. Windows, And, he says, workplace ideologies of ten conspire against projects at two levels. First, he says. CIOs don't always "calculate the real costs and real risks of big IT projects," such as ERP denloyments Often Sutton argues, they just see the benefits to the company and are a hit too overconfident in

he says, some CIOs ignore the most success of project teams when starting a new endeavor He claims stud-

ies show that the No. I factor in a project's success is the experience that a team has working together. Top often IT execs mix up a team with new talent that undermines the chemistry that made is successful, Says Sutton, "In

their own shiti.

tier \* Second

cessful team, why would you break it un> eam creation:

Is it a science ... or is it an art? Sutton claims it's a hit of both, but Adam Miller argues you can turn it into more of an exact science with the right tools. His, of course. He's the CEO of Cornerstone OnDemand Inc. in Santa Monica, Calif., which offers its eponymous service for companies that want

### HOT TECHNOLOGY TRENDS, NEW PRODUCT NEWS AND INDUSTRY BUZZ BY MARK HALL



quantifiable measurements of worker performance, as well as career tracking and development Miller claims that with the

right data on IT staff members, a manager can assemble the best team for a project by simply telling the system what skills are necessary to pet the job done (It doesn't account for personality quirks.) The Corner stone OnDemand service will deliver a list of those with the pecessary talents. Miller claims that identifying team member skills is increasingly difficult, especially in large IT shops, because of such new realities as offshoring and the rapidly disappearing talent of baby boomers. The service

### starts at \$30 per user per year. 'Disks are cheaper

than ... ... tollet paper." That's the observation of Nien-Ling Wackor She's the CEO of Loon Beach, Calif.-based Compalink Management Center Inc. which has done business

since 1987 as Laserfiche. She calculates that it costs .00005 cents to store a document image on disk drives today whereas a single sheet of twoply TP runs .0004 cents. If disk drive makers move into the custodial business, she

on multiple potterns in real-time data quips, there could be "paperwith its Anama less toilets." But it's a good Event Process thing for Laserfiche that the ing Language so-called paperless office nevor came to fruition, because there would

> its document management system Laserfiche's tools scan in documents, and its QuickField software uses pattern recog

nition to populate and index templates for easy document storage and retrieval. You can even use Quick Field to move stored documents into new forms for compliance and other purposes. Wacker says next year QuickField will add workflow capabilities. Pricing starte at \$2 500

### Develop intelligence

real-time events. If you are building applications that are fed by vast and rapid erreams of data, such as credit card processing, radio frequency identification and network security systems, you're a candidate for the emerging field of event-stream processing development. Or so hopes Mark Palmer, vice president of event stream processing at Progress Software Corp. in Bedford, Mass. He argues that most programmers "need a new attitude, a new way of

thinking" when it comes to creating applications that are ply intelligence in real time to these environments. "It's not the query and response thinking of traditional business intelligence, he says. He claims the breakthrough that Programes made was the ability to overcome the "temporal

constraints"

Progress ships a suite of tools that are designed to let you model, store and correlate events so you can detect perterns in the data in real time It ships a specific module called a smart block for equity trades and later this year will ship another module. though Palmer would not say whether it would be for fraud detection, security or RFID applications 2

### Treat secure storage as a priority.

(And you won't have to treat lost data as a tragedy.)





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### Dubai Seeks IT Business In Addition to U.S. Ports

United Arab Emirates wants city to be an attractive outsourcing destination

BY PATRICK THIBODIAL Witt United Arab Emirates is at the center of a pulitical controvers

in Washington over whether a communication of the Person Gulf should be allowed to take over terminal operations at six U.S. ports. But the UAF has es sights set on more than ports: It also wants Dubai, its largest city, to become a mojor center

The UAF's government has been building a modern infrastructure in Dubai and elearing away all taxes and visa burdles in an effort to encourage componies to set un IT operations there, said Mehtab All Saved, director of marketing or Madar Research market research firm. "They are positioning themselves against India," he said.

### **Existing Presence**

Many U.S. IT wenders already have offices in Duhai, primarily to support customers in the Persian Gulf region. Among. them is Sierra Atlantic Inc., a Fremont, Calif.-based offshore IT services from that arranged

an office in Dubai last Amoust. "Compared to India, it is ex-CFO Rain Roddy notine that labor costs in the UAF can. he as much as 50% more than they are in India, where his company has the bulk of its operations. Moreover There is not sufficient local talent in

Dubai," Reddy said. Nonetheless, he added, the cits will be an important base for supporting customers and delivering high-end IT architecture and design services

Thus far, the UAF has barely made a ripple in the outsourcing market. And despite its oil riches, handsome other

parks and lack of toxes, the tim country faces challenges hesond the issues of cost and as limited Liber reed The contentious move by

Duhai Ports World a states owned company, to acquire The Peninsular and Oriental Steam Naviention Co. in London for \$6.8 billion further illustrates the UAF's efforts to diversify its economy. The port deal would put DP World in charge of terminals at the ports in New York, Philadelphia. Baltimore, New Orleans Miami and Newark, N.I. But if the deal falls through, it could

prompt to be a problem for the

outsourcine bub. "If there is a neveral of a

project humans deal Lucarti assume that will cause recole to take a contain on view with remard to where and how they can do husiness," even with I Footsourcine vendors exid lane Steech, director of the Information Technology Services Qualification Center at Carnegie Mellon University's School of Computer Science in

Pittsburgh. Although routine I'l' sonport isn't likely to get the political attention that the port or recover is receiving you can make the case that if loutsourcing vendors] are hondline anything that involves strategic or sensitive data

transactions that could be a said Arul Vashiethy CEO of

concern," Siegel said. The UAF is considered an ally of the U.S., but the port takeover has met with youal approxition from members of Concress who are upset about plans to allow a company from a hostile purion to manage U.S. facilities. The White House though, has said it won't allow

the deal to be blocked Despite the limit stions of the UAE's labor pool and the propolitical risks. IT services firms focusing on the Middle East and West Africa "see Dubai as an excellent location

NeofT.com Inc. in San Ramon Calif Vashistha said Dubai wants to establish most me the Singapore of the Middle East Rita Gunther McGrath, on associate professor of management at Columbia University's beginess school in New York has been advising Ireland on attracting foreign investments She said the Irish government sees the UAE as a potential rival for IT-related work McGrath, who has visited

www.computerworld.com

Dubai, described the UAE as a relatively friendly country that is technology-savvy and has for hasing regional operations," "an appetite for modernity."

### Oracle's Sleepycat Purchase Doesn't Rile MySQL Users

Berkeley DB buy worries users less than prior deal

BY ERIC LAI Oracle Corp. this month bought Sleeps cat Software Inc. its several acquisition in the past five months of a company offering technology that can be used as a storage envine for the MySOL opensounce database

But the purchase of Lincoln. Mass, based Sleepycat isn't prompting the same level of concern amone MySOL us ers as did Oracle's October ourclase of Innobase Ov in Helsanki, Finland Innobase's InnobB software is used much more widely with MySOL than

Sleepycat's Berkeley DB is, according to users and analysis. Many users fretted that Dracle bought Innobese simply as a hostile move against MySQL. said John Ahbott, an analyst at The 451 Group to New York.

"It was hard to see why Oracle

did at other than to serew or MySON "be said Sleepweat claims that there

have been more than 200 million deployments of Berkeley DR. The software is embedded in open-source products such as the Linux and BSD Unix operating systems, the Apache Web server, the OpenLDAP directory and the OpenOffice annile stym costs

### Deployment Limited But Berkeley DB basn't bown widely adopted by MySQL us-

Cole said. "InnoDB came along

ers, said Jeremy Cole, a former Boyd Hemphill, an Austin-MySQL AB employee who now based MySQL administrator helps oversee about 8,000 infor the Texas state investment Mallations of the open-usany concurred with Cole's point of database at Yahoo Inc. view. Berkeley DB "was never "The BDB sprace engine fully supported Jon MySQLL was added to MySOL in the and I'm unaware of anyone us early days as a prototype for ing it in production," Hemphill adding transactional support." said. 'Oracle's purchase of Inno-

shortly afterward and quickly land) troubling because it was a surpassed BDB in usefulness, much better-supported engine." speed and features. No one has Oracle said in documents posted on its Web site than

DB was much more shocking

there "currently are no claus to Software Trio discontinue any of Sleement's products." Berkeley DB will be marketed for network edge anplications, according to Oracle, which said the software will be a companion product to its existing Times for and Oracle Lite embedded databases (see

The company added that it will maintain Skyewyat's duallicense approach by offering commercial licenses for Berkelev DB and making it available to open-source developers. In a similar vein. Oracle said less fall that it expected to negotiate an extension of Innobase's contract with MySOL which expires this year In addition to the acquisi-

tions of Innobase and Sleepycat, Oracle last lune beauth TimesTen Inc., developer of the hanna, an analyst at Fornester Research Inc., said Oracle is trying to embrace embedded and open-source databases technologies it previously avoided as potential distractions or products that could

cannihalize sales of its core databases P



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United Arab Emirates wants city to be an attractive outsourcing destination

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did it other than to screw up MySOL," he said. Sleepwat claims that there

have been more than 200 million deployments of Berkeley DB. The software is embedded in open-source products such as the Linux and RSD Unix coverting systems the Assolu-Web server, the OpenLDAP directory and the OpenOffice application suite.

### Deployment Limited But Berkeley DR hasn't been widely adopted by MySOL us-

ers, said Jeremy Cole, a former MySQL AB employee who now helps oversee about 8,000 installations of the open-source database at Yahoo Inc "The BDB storage engine

was added to MySOL in the early days as a prototype for adding transactional support." Cole said, "InnoDB came alone shortly afterward and quickly surpassed 8D8 in usefulness. speed and features. No one has looked back since "

## Software Trio

### Boyd Hemphill an Austin-

based MySOL administrator for the Texas state governmen concurred with Cole's point of view. Berkeley DB "was never fully supported fon MySOLL and I'm unaware of anyone using it io production." Hemobill said. "Oracle's purchase of Inno-DB was much more shocking [and] troubling because it was a much better-supported engine." Oracle said in documents

posted on its Web site that

there "currently are no plans to discontinue any of Sleepycat's products," Berkeley DB will be marketed for network edge applications, according to Oracle. which said the software will be a companion product to its existing TimesTen and Oracle Lite embedded databases (see chart)

The company added that is will maintain Sleepycat's duallicense approach by offering commercial licenses for Berkeley DB and making it available to open-source developers. In a similar vein, Oracle said last fall that it expected to negotiste an extension of Innobase's contract with MySOL which

expires this wor In addition to the acquisitions of Innobase and Sleepycat. Oracle last June bought TimesTen Inc., developer of the TimesTen database Noel Vishanna, an analyst at Forrester Research Inc., said Oracle is trying to embrace embedded and open-source databases - technologies it previously

avoided as potential distractions or products that could cannibalize sales of its core detabases 9

### SHARP:



Any MFP can print colorful growth charts. How many can actually help you achieve them?









### BM Seeks Data in Battle With SCO

IBM has requested that Hewis Packard Co., Microsoft Corn. Sun Microsystems Inc. and Star Capital Corp. turn over surreges to help in its long na local battle with The SCO Group Ing. IBM filed the orders for documents related to anies and SCO concerning Unix source code. The discute dates back to 2003, when SCO arged IBM with using source code that SCO claims to com

### Sun Buys Patch Tool Maker Aduva

Sun has agreed to acquire po inc. for an undisclosed sum. Adams's OnStane software held mate the deployment of eare patches to Linux- and ris-based computers. Sun offer Adura technology as will offer Adays to part of the Sun Grid hested vare service and as a star stone enterprise tool. The deal is pected to close by midyeer.

### eorgia Awards IRM \$3M Services Pact lid has been awarded a contract worth short \$3 million to manage the IT assets of the state of Georgia. The deal sino calls for IBM to manage the

state's vehicles and facili gis estimated that the deal could save more than \$35 million in set- and floot-management

### costs over the next four years dicrosoft Ships

Microsoft has started shipping a test version of the next refe of its e-commerce software. sixted for general availability in soft Commerce Server 2006, the first to ship since 2002, includes ors from Microsoft's Biz-Talk Server integration soft that can link e-commerce eveo with back-and forescial ons, such as those fro SAP AG or J.D. Edwards.

## SAP User Group Opens Up To Attract New Members

### ASUG officials look to draw more customers in the U.S., Latin America

WY CHIMA MARTEN

THE NORMALLY SECTEtive Americas' SAP Livers' Group is opening its done a smale in an effort to attract more SAP users to its ranks. "We're definitely in growth mode." Mike Perroni, presi-

dent of ASUG, said in a recent phone internal The user group, founded in 1990, has been more granded than others in recent years. with officials generally unwill-

ing to comment publicly on SAP issues. Perroni, who is also vice president of IT at energy services provider Halliburton Inc. in Houston, said the group

decided to speak up in the hopes of boostine membershin ASUG counts more than 45,000 Individuals and over

1,300 customer and partner companies amone its members, according to Perroui. "The user group has always been the best-kept secret in

the entire SAP ecosystem." said Rod Masney, executive vice mesident of ASUG, Masnev is also global information and technology architect at Owens-Illinois Inc. (O-I) a glass packaging company in Toledo, Ohio.

### On the Right Track David Dobrin, an analyst at

B2B Analysts Inc. in Cambridge, Mass., applyaded ASUG's effort to be more

vocal and try to attract more members "ASUG has been a reasonably effective organization." Dobrin said last week

They've been able to balance all the conflicts pushed onto it in an OK way However, he did note that users should be more sources.

sive in their efforts to get yen dors to meet their needs "Customers of application windows are the most suring and forgiving." Dobrin said noting that, in general, ERP and CRM users put up with

### The user group has always been the best-kept secret in the entire SAP ecosystem

ROD MASNEY, EXECUTIVE VICE PRESIDENT OF ASUS AND GLOBAL INFORMATION AND TECHNOLOGY ARCHITECT AT OWENS ILLINOIS INC. vendor behavior that consum-

ers wouldn't tolerate, particularly the delivery of poorly tested, burgey software The top concern of the independent, nonprofit, voluntere-run cotity is ensuring

return on investment for SAP users and that the vendor erovides strong support services. ASI IG officials said Perroni said another of ASUG's primary missions is to

help customers decide when to undate installed SAP software. In Halliburton's case an undate from MySAP 2004 to MySAP 2005 is planned for 2007. Perroni said

Halliburton bas one of the largest global installations of SAP's enterprise applications. with 30,000 users at 350 field

operations in more than 100 countries. O-I. meanwhile, bas started

work on a global rollout of MySAP FRP 2004 It is start. ing in Europe and moving to the Asia-Pacific region, where it has been using the older R/3 4.6 ERP application.

### Mover and Shaker The user group has lone been

a prime mover in influencing SAP to continue supporting older releases of its software so users aren't forced to "rush off" a particular version. Permni said. "You don't bear much noise (from users) about moving to the next release," he said

ASUG isn't always hanny with the speed at which SAD releases certain components of its software, according to Perroni, but he ranked that failing as a "pretty minor"

User group members also fueled a move to collocate ASI/G's annual user confee. ence aloneside SAP's Sanoblee 06 U.S. event in Orlando startine May 14. ASUG members had taised concerns over the timine of the individual events. which are typically held about a month spart.

Martens is a reporter for the IDG News Service

### **New Microsoft Tools Link Outlook and Applications**

Dynamics Snap programs aim to more tightly integrate processes

BY MARC L. BO Microsoft Corp. last week rolled out a line of integration tools that it said can more tightly weave topether its business applications with the Office productivity suite.

The new Dynamics Soon line of tools, called Snap-Ins. will enable users to triever workflows or access data in the AX 3.0 (formerly Axapta) ERP and Microsoft CRM 3.0 systems through Microsoft's Outlook personal information

Microsoft said the four Dy-

manager

namics Snap tonls, built under the code name Project Green. can be used to eliminate redundant data entry, boost productivity and more tightly integrate the business processes of multiple Microsoft

### **Product Offerings**

Helene Cole, CEO of Altara, a Basking Ridge, N.I.-based integrator, said the updated tonis promise to eliminate the timeconsuming task of having to enter the same data into Out look and a corporate AX ERP

Cole described the Dynamics Snap offerings as the first wave of technology that aims to solve the problem of redundant data entry between ERP and other systems, such as e-mail. Microsoft currently embeds similar integration tools in its GP 9.0 FR P soft. ware and offers stand-alone tools called Portal Lite for its SL ERP package, said James Uteschneider, general manag-

er of marketing at Microsoft's **Business Solutions unit.** The four new tools for AX 3.0 and Dynamics CRM 3.0 are the first branded under the Snap-In name, Microsoft said. The new Dynamics Snap

tools include Timesheet Management Snap-In, which can link appointments or meetings scheduled in Outlook to AX: Vacation Management Snap-In. which lets end users submit time-off requests through Outlook; Business Data Lookup Snap-In for AX, which can be used to find information in AX through the Office interface: and Business Data Lookup Snap-In for CRM 3.0, a lookup tool for CRM software

The company plans to add to its list of Snap-In tools but will wait for user feedback to determine what type of tool will be developed pext and when it will ship, according to Utzschneider.



## with Intel built in, Bumrungrad has **expansion built in**



Microsoft Rivals File

New Complaint With FC

rivals List week lisheed a new

complaint with the Europe on

Commission, contending that the com-

runy's business practices are shutting

A coalition called the European

(ECIS) which melades IBM Notes

Committee for Interoperable Systems

Corp., Oracle Corp. and Red Hat Inc.

made a formal complaint to the com-

ent and future." The products include

The complaint cited Microsoft's

information for its Office suite, which

refusal to disclose interesperability

dows Vista operating system

would allow stronger

links with compet-

ing products such

as Opent Office and

attorney Thomas

Vinic "This has ern.

cial implications for

Littux on deskrops.

Microsoft dis

Startifley, said ECIS

the Office suite and the incoming Win-

### **GLOBAL DISPATCHES**

An International IT News Digest

IBM and a few other competitors who constantly seed to use the combiner. process to their business advantage." the company said. ■ SIMON NOT OR JOG NEWS SERVICE

### Tokyo Exchange to Study U.S., European IT

ARRESTS SERVER Technic Street Exclusion Inc. will visit masse U.S. and European stock market operators early next month to try to mission over a "range of products preslearn ways to better manage their own

IT systems. The exchange decided fast month to restructure its EE systems following a string of computer breakdowns. Tokyo Stack Exchange Chairman Taiwa

Nishimuro told the American Chamber of Commerce in Innon in a wnow-h huns IT problems were blamust for brief road ing shutdowns in Nov

sember and January Officials will visit the New York Stock Exchange, Nasdaa and other exchanges to find out how we

customers with one stock computer system," Nishimuro said. MARTYN WILLIAMS 106 NEWS SERVICE

### Audit Finds Australian Agencies Lack Security

N AUSTRALIAN National Andie Office (ANAC) management review of FF security released lanlast year found that some government acencies have not implemented effec-

tive security policies. The ANAO andit assessed eight atencies and determined that only two not identified in the report, have so far implemented programmy that one securithe security of internal EE systems and manage exceptions and variations. The remaining agencies, particularly those that contract IT services to third-party firms, do not maintain key security procedures and configuration docu-

mentation the ANAOwaki Kumar Parakala, global chief operating officer for information risk man agement at KPMG International, said the "deficiencies would have a direct impact on the service delivery of the

any remarked The agencies mostly agreed with the ANALY's suggestions to improve security processes and create standards. MUNICIPAL WHEN THE PROPERTY OF COMPUTERWORLD TODAY (AUSTRALIA)

can accommodate the Compiled by Mike Bucken

### Briefly Noted

iast week said it will know team lion (U.S.) in its Indian on over the next two years. STMicroelectronics is also hiring 300 eng neers for its chip design center in Holda by the and of this year as part of a plan to boost its India force from 1,500 to 5,000 by 2010 I JOHN RIBERO IDG NEWS SERVICE

has acquired Sunny-vale, Calif.-based chlange Inc., a ensulting company that helps unitesses streamline and into eir services operations, for \$20 ion (U.S.) in cash. CMr come part of Wines Tech the Bangalore-based services firm's global IT division. CMange provides tion for BMC Software Inc. IN TOTAL SAME IN IDG NEWS SERVICE

ent center in Char officers ledia that will am ity assurance testers who il support all Opera products. A on for Oslo-based O ich makes the Opera Web brown or, said the operation will em bout 12 people in the first year JOHN RIBEIRO, IDG NEWS SERVICE

missed the changes ECIS is a front for Continued from page I PIM

vital to manufacturum burb to comply with posymment regulations and to ensure that corporate secrets don't servad to competitors

Moore, an East Aurora, N.Y. manufacturer of previous parts for military, acrospace and industrial customers, now uses a total that supports book invollectual property assignment rights, but it will soon need "a much more flexible asstern" or ing capabilities, Boldt said. He described the current tool as a heavily customized application based on the Teamcenter Engineering PLM product from USG Corp. in Chicago.

Moor wants a more flexible IP access system to enable

entineers to rapidly share data with colleagues around the world, Boldt said. Some of the company's partners are in countries that lack strong intelloctual property protections.

All four deals in the quarte

The manufacturer is seeking a system with sophistic and security rules that cao do theres such as produce com puter-aided design models of postucts, which can be shared with partners while hidine

proprietary embedded calculations, Boldt said. He said the company is considering whether to have or build such a prostuct, but he is unsure whether a packaged

PLM system that meets Moore's moveds everythe tracking Joed Dougherry, PLM manoper at Boying Integrated Defense Systems' Rotorcraft division in Philadelphia, said

his company has protected its intellectual property by limiting access to PLM data mostly to secure military customers Rotorcraft's PLM system is also based on Teamcenter Engineering and is used in engineering, planning, procurement

**Guarding Jewels** 

and munufacturing operations Dougherry said sharing confidential data with partners and suppliers is restricted by U.S. International Traffic in Arms Regulations For example he said, outside access to his unit's intellectual property would necessitate passage though a secure Web-based portal that

requires a removement cleaned user ID and possword. Even inside Boring's finewalls, the PLM application has a proprietary set of role-based access policies that further limit what a user can see. Dough-

erty said Meeting Challenges

Charles Foundaller CEO of research firm Darwech Inc. which sponsored last week's conference, said companies face significant challeness in their efforts to protect intellectual property. The ability to share electronic design data with suppliers and customers around the world has become commonplace, he explained. "It's far too easy to irrady rtenth; share your IP with the world by hitting 'Send,' " said

Foundviller. "On the other hand," he said where companies have lacked down everything, engineering productivity, collaboration and innovation is grinding to a balt That's why engineers resist security measures that set in their way. There's no magic

notion to fix this Foundviller said that onplications that can address at least some of the security issues are starting to come out. but he noted that it will take both a cultural shift and an attitude adjustment to make it work."





### Microsoft Rivals File **New Complaint With EC** OME OF Microsoft Corp.'s biggest rivals last week ledged a new complaint with the European

Commission, contending that the company's husiness resetions are election. out competitors A condition - alled the European Committee for Interoperable Systems (ECIS), which includes IBM. Nokia Corp. Oracle Corp. and Red Hat Inc. made a formal complaint to the commission over a "range of products present and future." The products include

the Office suite and the upcoming Windows Vista operating system. The complaint cited Microsoft's refusal to disclose interoperability information for its Office suite, which

would allow stronger links with competine products such as OpenOffice and StarOffice, said ECIS attorney Thomas Vinie, "This has cru cial implications for Linux on desktops."

Microsoft die. missed the charges. \*ECIS is a front for

he said

An International IT News Digest

IBM and a few other competitors who constantly seek to use the regulatory process to their pusiness advantage," the company said. ■ SIMON TAYLOR, IOG NEWS SERVICE

### COMON TATEOR, NOTHER WAS SERVICE Tokyo Exchange to Study U.S., European IT

-FFICIALS FROM Tokyo Stock Exchange Inc. will visit major U.S. and European stock market operators early pert month to tru to

learn ways to better manage their own TT systems The exchange decided last month to restructure its IT systems following a string of computer breakdowns.

Tokyo Stock Exchange Chairmao Taizo Nishimuro told the American Chamber of Commerce in In-GLOBAL FACT nan in a speech here

last week IT problems were blamed for brief trading shutdowns in No-

vember and January. Officials will visit the New York Stock Exchange, Nasdag and other exchanges Ito find out) how we

languese customers and international customers with one single computer custom," Nishimurn said MARTYN WILLIAMS, IOG NEWS SERVICE

### Audit Finds Australian Agencies Lack Security

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Compiled by Mike Bucker

### Briefly Noted

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vale. Calif.-based citie m for \$30 o (U.S.) in cash. Chi a nert of When T of for BMC Se

III. MANES NICCOLAL I'M NEWS SERVICE oera Seftware ASA is settle levelopment cooter in Chas sorthere india that will one

id the exercities will a

JOHN RIBEIRO, IDG NEWS SERVICE

### Continued from page 1 PI M

vital to manufacturers both to comply with government regulations and to ensure that corporate secrets don't spread

Moog, an East Aurora, N.Y., manufacturer of precision parts for military, aerospace and industrial customers, now uses a tool that supports basic intellectual property assignment rights, but it will soon need "a much more flexible system" as it upgrades its manufacturing capabilities. Boldt sald He described the current tool as a beavily customized application based on the Teamcenter Engineering PLM product from USG Corp. in Chicago. Moog wants a more flexible

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Meeting Challenges Charles Foundytler, CEO of research firm Daratech Inc. which sponsored last week's conference, said companies face significant challeners in their efforts to protect intellectual property. The ability to share electronic design data with qualities and contomers around the world has become commonplace he evoluted "It's far too easy to inadvertently share your IP with the world by hitting "Send," said

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potion to fix this. Foundyller said that applications that can address at least some of the security issues are starting to come out, but he noted that it will take both a cultural shift and an attitude adjustment to make it work."

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### Breaches Push Companies to Improve Internal Safeguards

Security managers shifting their focus to preventing accidental data leaks

BY JAIKUMAR YIJAYAN ETER SPENDING years implementing controls designed to protect their network perimeters from external threats, companies are under growing pressure to do the same thing to guard against internal data lapses, according to attendees at RSA Conference 2006 here this month

concerns about accidental data leaks or thefts result. ing from internal miscues at a time when companies are increasingly opening up their networks to business partners, suppliers and customers - and when a rash of recent data breaches caused by the mishandling of information has put several businesses in an unwanted spotlight Also playing a role are regulations that require companies

Driving the trend are

to exercise greater control over the data they handle. conference attendees said "Even up to last year, there was a buse focus on strength. ening the perimeter to make sure the backer from outside didn't per in " said Street Mo-Irvine, director of corporate

security strategy at IBM "Fyeryone was concerned about malware penetrating the nerimeter. More recently, though, there's been a hie shift in for cus to what's going on inside the enterprise." McIrvine said.

### More Data to Protect

Companies need to look at their internal processes and data flows to see what controls should be put in place to ensure that information is secure said Gene Fredriksen, chief information security officer at Raymond James Financial Inc., a financial services firm in St. Petersburg, Fla., that manages almost \$28 billion in assets "Traditional information security has been year enod

at protecting structured data." Fredriksen said. But now, be added, there's a whole class of unstructured data in spreadsheets. Web forms and other formats that is just as critical to business operations but has little of the formal rules that protect structured dues As a result, "a lot of the

compensating and reactive products in Acton. Mass. controls that I used to have are no longer effective." Fredrik sure requirements are forcing sen said. As part of its efforts

Raymond lames is now considering a product from San Francisco-based Vootu Inc that's designed to monitor confidential data and prevent k from leaving a network

### A New Way of Thinking The need for hence internal

security is pushing many companies to look for new tools to belo them monitor network traffic, databases and applications in real time said Murray Mazer, vice president of corporate development at Lumigent Technologies Inc., a vendor of database monitoring "Governance and disclo-

disclose it to anyone, he noted "But that is simply not acceptable anymore," Mazer said. People are being held more accountable for the data (they collect) companies to think differently There's also growing inter-

A lot of the comreactive [security] controls that Lused to have are no longer

GENE FREDRIKSEN, CHEF INFORMATION SECURITY OFFICER RAYMOND JAMES FINANCIAL INC.

about their responsibility for data " Maner said In the past, businesses could quietly fix a breach and not

server in New Hompshire. Page 23

what employees "can and cannot do in an enterprise McIrvine said. One example The vendor has refined the role-based access management canabilities of the identity management products in its Tivoli software suite In addition, IBM recently developed software that works with the Tivoli tools to belo companies spot, audit and report unusual behavior within

est amone IT and security managers in stronger tools for authentication and access

als at the conference.

management, content filtering. document management and digital rights management according to security profession-

IBM has been focusing on

delivering products that allow

companies to better control

### an enterprise network. Mcfredno sald b MORE ON THIS TOPIC Law enforcement officials investigate a

### New Threats Outflank IT Defenses, Says Vendor Exec

BY JAIKUMAR VIJAYAM

onan is president and CEO of Internet Security Systems Inc., an Atlanto-based vendor of IT security products and managed services 155 reported revenue of \$330 million last year, and its customer base includes 17 of the lorgest banks worldwide. In an interview with Computerworld at RSA Conference 2006 here this month Norma spoke about what he described as the "con-

tinuously" changing

security threats faced by corporate users Now has the intrincape of IT some rity threats evolved over the next

low years? The threat spectrum changes continuously. We've seen the threat spectrum changing from loud and disruptive to quiet and very, very insidious in many ways. Five years ago, you saw the advent of self-propagating worms,

But is socurity being seen more as res enabler or an impedimeet? It certainly shouldn't be seen as an impediment. But at the same time, it is an awfully expensive enabler the way it is being done today. This is why best-of-breed is necessary but in itself is not sufficient. I strongly believe that the infrastructure providers such as Microsoft and Cisco will not

to a control-systems

approach operating

and [operate] much

less like a stovepipe

borizontally across the

distributed enterprise

approach, with lots of

independent products

each looking for a spe-

cific type of threat.

you saw loss of desirable solve this problem by adding service attacks. Today, you are features to each of their infra seeing the threats becoming much more [targeted], which makes traditional signature. based defenses completely outmoded. This is why we believe that security has to move

structures. In fact, they are using security as a competitive differential and a closed advantage against their competitors. Why is IT security so expe Operationalizing it is making it expensive - the fact that

the typical customer might be managing 15 to 20 different relationships, 15 to 20 different data structures, 15 to 20 different contract vehicles, support furvice-level agreements), updating capabilities and so on.

Does focusing on compliance strengthen or dilute enterprise security strategies? That's an interesting question. I take a step back and say, Comeliance with what? Compliance assumes you have a policy. Is the policy internal, or is it

regulatory? I think compliance is being used as a buzzword, and I'm not sure it means anything anymore. It has been good for the industry because

of the awareness. But what's good for the industry can also be confusing for the industry. I think that because the harriers are so low in the compliance world, it is a survival-of-the-

fittest game if that's your only differentiation epite all the talk about an increased focus on security, why tuding to soo so man

data broaches being reported these tere? I think it it showing us that the fearless, trustwo thy, self-defending networks are failing. The fact is, our industry is growing at 10% to 15% (per year) and is about \$18 billion (in total revenue) Financial losses due to cybercrime [are] growing at 10% to 15% and (are) about \$50 billion. So the more we advance, the bizger the losses get. There is something wrong with that, and I believe strongly that it is because we have pigeonholed ourselves into an approach to the industry that, quite frankly,

lacks innovation.







## SAS BUSINESS INTELLIGENCE

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Challenged with bilationing offents to appoor the latest strategic installates while all between government and TASE dates up whose the reliable offents of between 5 centers and the strategic that the reliable of a strategic than the properties of the strategic than the strategic than the strategic than the strategic than a strategic through the offents are strategic than and strategic than and strategic than and strategic than and strategic than a strategic th

Regardines of the project let – building data warehouses, consolidating multiple databases, clearwing data in real time, augmenting operational data with new information, or even dealing with IEP systems —565 halley so uncomed, cleares, consolidation and create value from all your enterprise data. Whether your data triagration needs are stant-d-sons, or you need to seemleastly integrate with our scalable, and-to-end lutteries and areafting belleting.

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### Factiva Consolidates File Sharing Across Its Network

News provider hopes system reduces branch-office need for technicians

ACTIVA, like a lot of midsize comeanies with dozens of branch uffices, has faced a growing problem in recent years: Its remote tape backups have often failed, forcing administratues to travel to (apoff

riter to 6x them To solve the problem Factive a joint venture of name and information providers Dow lones & Co. and Restore Group PLC, early last year moved to replace its tape: based backups with wide-area file-sharing (WAFS) technolony from Tacit Networks Inc.

The new system promises to let the IT staff in Excting's main data center at its South Brunswick N.J. head-warrers manage data files in each of its 42 branch offices

**Ongoing Project** Factive began rolling our Tacir's IShared cachine hardware appliance last summer and expects the project to continue over several more years, said Dan Weiss, systems architecture and administration dissotor at Excelor

The WAFS technology which uses a distributed file system to allow access to the same file from multiple locations, has so far been installed in four remote offices, he said. Each of the remote offices has

between 20 and 25 workers. "The goal - nirvana - is to have everything in one place and for it to be managed out of one site." Weiss said, adding that it's also important that all files be "backed up in one place using the enterprise infrastructure we already have

in our main data center." So far, the WAFS architecture is providing the four offices with access to files

in Factiva's main data center over a WAN. Write said Any changes to the files are recorded at the main data center where backups and restorer can be managed centrally, he

said Each of the remote offices runs file-share and Active Directory servers, as well as print servers, Weiss said Karin Borchert, Factiva's chief operations officer, said the WAFS technology will also allow the company to support

personnel working outside of

its offices. The company was

tanes in direct attached corace drives for data backup, and it continues to do so in branch

ony basn't yet been implemented Weiss raid Technicians from Factiva's data center are sent to restore stalled tape backups, swap out broken tane drives and perform other "innitorial-like" functions in the regional offices. Weiss said. "It's not a particularly good use of our

structure to support workers

Factive has traditionally

used nontechnical, local per-

sonnel to load and change out

in home officer and remote

locations Boschov said

officer where WAES technol people and resources," he said.

technology as almost "black box" in nature and simple to set up. "It was a gradual vollout to one office at a time over four to free months, with one person deploying it," he said, "It was really quite seamless." Factive chose the IShared rurner over the ether half

dozen or so vendoes of the technology mainly because Tacit is close by which belos with support, Weiss sald. "IT organizations are realizing that the traditional networking approach of simply throwing more bandwidth and networking bardware at the problem is not the solution."

The goal to have everything in one place and for it to be managed out of one site

### SYSTEMS ARCHITECTURE AND ADMINISTRATION DIRECTOR FACTIVA

Storage (O in Stillwater Minn \*Some vendors are focused just on improving low-level bandwidth, while others are focused on specific application acceleration and others do various combinations," Schulz

Schulz cautioned users that IT organizations need to ask vendors "waving the WAFS flag" just what services and IT issues their products address. He added that the technology is probably not a good fit for localized environments.

Marty Board, senior vice president for corporate development and marketing at Sybase Inc. in Dublin, Colif. Is the chief. evangelist for Sybase's 3-yearuld "unwired enterprise" strategy which alms to connect data stored in its host databases with mobile systems. In a recent interview with Computerworld Board talked about the state of

Sybase and its plan to return to growth on the back of its mobile technologies.

### What is the state of Sybase's core database business? We

launched ASE 15 last year. We can now encrypt all of the data inside ASE. Our competitors, like Oracle, encrypt data on the outside. But as it sits in an Oracle database? Not encrypted. Our [ASE] users are investment banks, huge trading bouses, the NSA, the CIA, so we spend a lut of time on security. Security was one reason we announced 640 new

ASE customers in 2005. Forty

### Svbase Exec Hopes Wireless Expertise Can Spur Growth percent of those wins were in China, where we are No.

2. We're not competing with any legacy brand perceptions there, It's a flat-out bake-off. and Sybase is winning more than its share there In the U.S. or Europe where it's a battle to get somebody to swap out.

it's much harder. Can you compete en price with open-scorce data bases? Open-source is

iust another business model: Get as many users (as possible) on your free offering and convert that into paid support. That business

model has been co-opted by the larger vendors, including us. We have Sybase ASE Express Edition. We have had 45,000 downloads of Express and a lot of that converted into

I had one his customer call and thank us for making Express free. He had a lot of MySQL in his company, and he wasn't comfortable with it. He said, "I don't want my people playing around with that thing.

### said Grey Schulz, founder and senior analyst at research firm because it will never get into

Another misconception about open-source is that it's free innovation. We have 1,200 engineers. And we're a lot smaller than Oracle The reality is that the proprietary vendors are more innovative than the open-source guys.

ISM recently liberalized the usa restrictions on its free version of DS2. Would you do the same with Express? I think we would. I can't right now identify what is would be. We'll adopt with the times on that, for sure,

What's your strategy for increa your 5% chare of the overall relatienal database market? Our mobility strategy has brought loss of customers who had never done husiness with us before Being treated as a strategic vendor on mobile data management is giving us the on-

portunity to come in there and start talking about our value on the data management side. With our ASF IS launch we have completely stabilized the 5% we do own. The issue is

Can we grow that 5%? We can grow u in geographies where they are not still worried about legacy brand perception. We'll continue to innovate and at least hold our own

Who are your top competits When you talk about who can compete with Sybase on wireless and data expertise, IBM can. It can do the data man agement. On the mobile side, they are a little late, but they have some of the products. They have the services arm to bring it together. Oracle thas not focused on mobility. Microsoft comes at it primarily from an OS or application perspective. They're there and they're loud, but usually it's with a partner, (Research In Motion! has strong brand rec-

ognition, which they hope to leverage beyond e-mail. Do most CIOs yet view mobility as mething more than giving Black Berries to the sales force? There

is some of that. But now we're seeine pretty broad-based evtensions of all back-end apps. That's a real change over 2004 and late 2003, when it was primartly mobile e-mail.

### U.S. Army Laboratory Makes Major **Linux Computing Cluster Move**

Purchase will more than double the MSRC's computing capability

BY PATRICK THISODEAU A U.S. Army supercomputing center with a legacy that dates back to the Electronic Numerical Integrator and Computer (FNIAC) launched in 1946 is moving to Linux-based class ters that will more than double

its computing capability. The Army Research Labora tory Masor Shared Resource Center (MSRC) in Aberdeen Md., is buying four Linux Networx Inc. Advanced Technology Clusters, including a system with 4,488 processing

cores or 1.122 nodes with each node made up of two dual-core Intel Xeon chaps. A second system has 842 nodes. In total, the purchase will increase the MSRC's computing capability from 36 trillion floating-point operations

per second to more than 80 TFLOPS, Army officials said. The decision to move into commodity clusters was not made quickly, said Charles I. Nietubicz, director of the MSRC. The lab held a symposium in 2003 to explore the issue and began running a small, 256-processor cluster system. "We saw that cluster computine was this new kid on the block and was interesting. said Nietubicz But the center wasn't about to start scrapping its other systems, made by Silicon Graphics Inc., Sun Micro-

systems Inc. and IBM, he said. Cost Advantage The MSRC isn't disclosine the purchase price, but Earl Joseph, an analyst at IDC in Framingham, Mass, said the average cost for a cluster works out to about \$2,000 per processor, compared with \$12,000 per processor for a

contivalent performance." Bluffdale, Utah-based Linux Network builds systems using Advanced Micro Democra Inc. and Intel Corp. chirs. The MSRC sale is the wendow's long. est supercomputing order ever Nietubicz said he was con-

vinced that clusters can work based on the MSRC's ability to get certain computational codes used in fluid dynamics, structural mechanics and other processes to scale to multiple processors mostly by using Message Passing Interface protocol-based code. MPI is used to create parallel applications

RISC-based system.

Nietubicz said other ven

dors will need to improve

their systems' performance

or "reduce the price to provide

Clusters accounted for about half of the total \$91 billion in

sales in the high-performance computing market last year. according to IDC A major consideration for moving to clusters is whether

the high-performance soft ware can scale to multiple processors. Systems that have been written in MPI can do so, but Joseph said companies that use off-the-shelf software usually find it difficult to make the switch because commercual applications don't use MPI Government John and universities, which own their own code, can usually invest the time to convert their code inco

MDI he caid Nietubicz doesn't see any major limitations to clusters. and while not all code can scale on clusters, he said the ermo problems occurred or the center moved from vector to shared memory. It



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Information lines at El Camino Hospital. A reading Cultivaria medical facility, El Camino Hospital revenue the highest raining in a recent potent survey.

But they rever exist in this mission to set information technology to help them improve parties exist. So the provide the formation of LMC coulded a review above to recent the provided of LMC coulded a review above to the result of LMC coulded a review above to the results of LMC coulded and the results of LM

### N.H. Breach May Have Exposed Credit Card Data

State IT worker placed on leave after malware is found on system

87 TODO R. WEISS The FBI, the U.S. Department of Justice and New Hampshire

officials are investigating a potential security breach after a malicious application was found on a state server during a rosstine check earlier this month. State officials said last week that there is no evidence yet

that any credit card information was stored on the server The New Hampshire Division of Motor Vehicles and the state Veterans Home use the server to transmit financial

information. The state's Liquor Commission uses it as a backup for sales transactions The server held only credit card numbers: no other nexsonal information was stored

on it, officials said. New Hampshire CIO Rick. ard C. Bailey Ir, said that an unnamed state Office of Information Technology employee was placed on paid leave as part of the investigation. He declined to comment further

on that action Impact Unclear

A spokeswoman for New Hampshire Gov. John Lynch said the ongoing investigation will look to determine whether the Cain & Abel application was ever activated on the server to look at the stored credit card numbers. \*We don't know at this point Ithat) it actually hannened" she said Bailey advised socidante

who have used the server for transactions to keep an ene on their could coul concern. Bailey said it is still not clear how Cain & Abel - a password recovery program

for Microsoft Corp. produces - was placed on the course The program can be used as malware by hackers to capture and crack passwords, according to several security vendors.

It does have some quasilegitimate purposes, I guess," Bailey said. But the program had been installed without m thorization and was not wanted on the server, he added.

Such an action could have been done from inside the state's system or by acception it through the Internet Bailey said A check of other servers on the state's computer network found no evidence of the

malware he said The program was found during a routine security. check undertaken by state IT workers while they were

evaluating a network intension monitoring system from Cisco Systems Inc. for notential nuechase, according to Bailey. The product they were evaluating the Cisco Security Monitoring, Analysis and Response System appliance, can

be used to search for system anomalies track them down and ston any threats he said

The affected server was taken to EBI officer last week to undergo forensic analysis. which investigators hope will determine how the program not into the system

Pete Lindstrom, an analyst at Spire Security LLC in Malvern Pa said the incident underscores the importance of constant network visitance "It iust gets back to cliches like 'defense in depth' and actually taking the time to monitor word systems " he said

Lindstrom said the Cisan technology likely beloed find the malware, but he noted than it could have also been found through regularly scheduled scans and checks.

LESSONS LEARNED Frank Hayes says the New Hampshire breach shows that security has in he not

See page 52

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DON TENNANT

## The Censorship Call

HE ONGOING DEBATE over the censorship of online search results in China begs a question that not enough people are asking: Whose job is it to decide what search results should be censored?

Perhaps it should be the job of the International Spelling and Grammar Police. Maybe they should do

something about the fact that when you Google the nonword "automonous." you get something on the order of 28,000 hits. Or the fact that when you Google the grammatically incorrect phrase "laying low," you get more hits (324,000) than you do when you Google the grammatically correct lying low\* (274 000) Maybe our children shouldn't be exposed to

such ignorance. Most of us would probably agree that that would be a little over the top. Is the answer, then, to have no censorship at all? Should the censorship of photographic images be abolished so that Google can serve up any image the sickest mind can create?

Most of us would aroue that's not the answer, either It's probably not too much of a stretch to conclude that someone needs to make the censorship call. and that a society's governing body should be that authority. National governments aren't perfect, but in the world order that's likely to be around for a while, they're what we have to work with

That brings us to China. You and I want every Chinese citizen to be able to read about the Tiananmen Square massacre, the Falun Gong and the Dalai Lama. The Chinese government disagrees. Who should make the call? U.S. Internet companies? The U.S. government?

We need to get it through our thick, self-righteous heads that it's not our call. Too many of us in the U.S. are taking the position that we should

fight consorship unless it's censorship that we hannen to agree with. We need to realize that the hypocrisy of that perspective is lost on no one, including the Chinese people.

A story that we posted on our Web site last week, headlined "Google Denies Acting Unlawfully in China," cited a report in the China Business Times that was

critical of Google for raising the censorship issue in the first place. The namer said Google is like "un uninvited guest\* telling a dinner host "the dishes don't suit his taste, but he's willing to get them as a show of remort to the bost

Yes, I'm very much aware that China's newspapers are govern-ment-controlled. But if you think that sentiment doesn't reflect the way the lanhairing (common people) approach these sorts of things, you don't know China. Don't think for a beartheat that the generality of the Chinese people wants foreigners coming in and breaking Chinese laws or undermining positions taken by China's government They may not be crazy about everything their government does, just as we're not crazy about everything ours does. But it's theirs, and they're every bit as

proud and patriotic as we are. As a journalist, I detest the restriction of information access. But part of me is almost glad that the Chinese people don't see a lot of what mes on in our own country. Hopefully they didn't see the obscene posturing of our elected officials earlier this month at a bearing of the House International Relations Committee when they belittled representatives from Google, Yahoo, Microsoft and Cisco for abiding by Chinese law

I also detest censorship of opinions But keeping our arrossance out of the limelight, and avoiding that embarrassment, is an all too compelling argument for an exception.



in China

VIRGINIA ROBBINS

### Making Your Case to the

### Board OING BEFORE YOUR

company's board Tof directors for the first time can be a fearprovoking moment. More is at stake than the current matter under discussion: your performance can have repercussions for your entire career. A bighly skilled data architect re-

cently asked me for tips on making such a presentation. He was honored by his board's request but concerned that he would make a misstep. Drawing on my experience from the many types of presentations I've done over the years. I outlined the following format for a successful status report: 1. Know your audience. You need to know what they expect from you and

how long you have. You need to know how much they know about your topic and how they feel about it Because board members often so on the attack when someone appears to be shirking responsibility, it's better to take too much responsibility for a

failed or late project. They could end un defending you instead

of laying into you. 2. Know your material. You are the expert; make suryour facts are correct. Speaking to your board is no time to shoot from the hip. You don't want to provide erroneous information that ends up in the board's minutes. Some boards like to see an exact expense number and others like to hear about market

share, but most want both 3. Don't use jarpon. Your purpose is to convey information. You aren't ening to impress people by peppering them with technical acronyms. Avoid them, unless they're in such wide use

that they're known to your parents 4. Know who's going to introduce you and what's going to be said. Be prepared with your own introduction should the person introducing you stumble.

5. Use the rule of three, Assuming that you have the standard three to five minutes for your presentation, summarize your message on one slide with three main ballets, each with three sub-bullets. Arrange your sub-bullets so you end on a positive note.

Under the first bullet, ensure that everyone in the room understands your project and its importance by briefly recapping what the project is, what value it brings to the company and how much it has cost. Whatever your hour has told the board is their truth. Make sure you present this information the same way your boss has. If your boss

has misspoken, then gently clarify. Under the second built state clearly whether your project is on track. Take responsibility for good news and bad. Provide the top three reasons why you are where you are. Make these reasons specific and concise. If a lead engineer quit or your team is learning from its

mietakes, say so. Under the third bullet, describe what actions you are taking as a result of your project's status. If you are on time, explain what you've learned about keeping all projects on schedule. If was are behind, talk about what you and

the team are doing about it. 6. Ask whether arrens has rese And be prepared to answer them. 7. Finally, practice, practice, practic

Know how long it will take to give the presentation. Ask your boss to belo you prepare for the board's questions And when called on to give your presentation, stand up straight and smile At the end, the board members may not remember everything you said bear your attitude and professionalism will

he recalled positively.

BRUCE A. STEWART Relationship Management Has Evolved

TS BEEN a decade since the first research notes on the role of relationship managers were published. In that time, most IT departments have instituted a relationship management function. Sadly, the life of a relation-

ship manager remains a difficult one. Relationship managers are often caught in a four-way struggle. Architects believe that the future rests in

their hands - and often castigate relationship managers for being too ready to back the client against their designs. Project leaders in development believe that the client relationship is theirs - and often blame relationship managers both for coming to them too soon with early-stage ideas and

for certing in the way when projects and maintenance requests simply need to be done. No one, of course, is happy to see the relations ship manager when rome thing has blown up and it's time to fix a problem

But the fourth side of this stroop! - the client - remains equally problematic. Clients shift suddenly from pushing the relationship manager away (just lot down my order, then so and make it so) to embracine him avidly (when some hot piece of technology has caught their eye). It's a schizophrenic life that drives relationship anagers to ask themselves late on a Friday afternoon, "How did I ever get

stuck here? Meanwhile the practice of seletion ship management has evolved as well Some of the tension being felt by rela-



from the fact that everyone in IT has caught up to the changing role relationship managers fill Often the Infrastructure and carrior dock exafferill one she note. tionship manager as simply the client's advocate doub opment and architecture often see relationship manseers as intermediation as port writers and "smooth ers" after difficult meetings. Few have asked themselves. What could these relation-

tionship managers stems.

Make no mistake, relationship managers have made significant beadway in the past decade. Their role has evolved into a cross between the traditional consulting firm's "partner in charge of the ac-

count" and trusted whiteer to the client Sadly, their relationships with the rest of IT have not fared as well, and this tension is showing. CIOs have begun asking their relationship managers to sten un the client relationship so that it can sustain application retirement and reinvestment decisions. They also want them to rearchitect portions of the business (not just systems) and

to confirm business case assumetions and tune investment strategies. Relationship managers need to start managing internal relationships with the same attention they have paid to managing client relationships. Then need to build internal credibility and will have to have some difficult discussions about roles and responsibilities In most IT organizations, at least three different groups regularly call on the business clients - architecture, develcoment and the relationship manager - a practice that can drive the business

client insane, especially when three different messages are communicated. Throughout the history of IT in enterprises, the goal has been to be in vited to the table early in the business's thinking process, where ideas can he tested and real influence over the

future felt. In many cases, the relation ship manager has, with a decade's work brought IT to that point. Smoothing out the lumps within [T - now - is the key to exploiting that credibility

and the invitation to contribute. In other words, managing relationships is everyone's job.

I Think I Get It

N THE article "Ray Kurzwell if wit Be Everything" [Jan. 9]

Kurzwei poses the question "Are

stand our own intelligence?" That

reminds me of a quote from tech-

nology analyst Emerson Puch. "Il

we could understand it, we would

the human brain were to timple

be so simple that we couldn't."

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### inject metrics into the environment READERS' LETTERS

### The Satisfaction of Doing the Impossible their minds. The San Diego group

W MAT A nice story Don Tenfor his son's watch ["Refusing Futility," Jan. 9), it made me smile and gave me renewed hope that my own "impossible" task will cose he mannered Manne

motto will be, "Just a foot away from success

Vice president, professional services, Houston

ENNANT'S ARTICLE SUMS up an experience I recently had I got a call from a company

on Nov. 11 saying they needed a system built by Thanksgiving Some work had been done, but they were stuck in the design. As an experienced SQL Server database developer. I knew there was little chance of completing a pro tern in few a works, but I decide I wonted to help. I found the I+I+II synergy we all love to be a part ed a lease of four that worked

more than 80 hours a week to out the thing together At times, I was coding by blind farth and intumon The payoff from trying was setisfying and resulted in one of the best gias I have had in 25 years We all figured out we were much better at what we do than any of

SS even knew Gods Coffman Proprietor, World Close Computing, Brea, Calif.

wccomprimewink.com Let's Do Lunch

C 10 POWER LUNCHES aren't is not the only place where they heopen ["Power Lunch," Jan. 9). As an example there has been a CIO roundtable in San Diego for the last four wears that mores marriarly for banch at a mamber site. Like the Atlanta group, there is no formal agenda, and members can discuss whatever is on

stays in touch by e-mail in the off months. Even though I now work in Las Veges. I've stayed part of the San Diego group - and I'm pert of a bimonthly CID power breakfast group here in Las Vegas Norbert J. Kebikas CIO, Sunterna Corp.,

North Las Vegas, Nev. Thanks for a Laugh

A S I READ "Mind Benders" in the Jan. 16 issue, I was laughing out loud, Humor is one thing that is lacking with needs these days. I have seeing them macros accurate with an "I don't get post mount for this stuff ohis on their shoulders. I yowed some years ago that I wouldn't take anything in life more than 60% sariously whenever possible. I really appre-

Andy Caldwell IS director, George County Hospital Lucedale Mies acaldwell@gch.ms

custo Don Tennant's humon address and phone number for unmodute works store

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## TECHNOLOGY

### GPS Repositions for Business GPS technology is most commonly found

in consumer goods like cars, cell phones and handheld navigation units, but it's starting to mature and is increasingly used in enterprise applications to both the public and private sectors. PAGE 30

### Semantic Web

This visionary project aims to enhance the Web by enabling computers to find, read, understand and use the content of Web doc umeots to accomplish tasks via automated agents and Web-based services. PAOE 32

### SECURITY MANAGER'S JOURNAL Zero-Day Infection Is Headed Off Efficiently

Headed Off Efficiently
Mathlas Thurman's team must eradicate a
virus, but his firm's antivirus vendor doesn's
respond for several hours — and that's a
long time in a zero-day attack. PAGE 34

OT MANY CIOS would frush to take on a business intelligence project like logge Basto's. As director of technology at the Georgia Administrative Office of the Course, Basto is working to implement a statewide Bi system for the approximately DOO state corest; most of which house

wide BI system for the approximately 1,000 state courts, most of which have different databases, case management applications and reporting tools. "There is no state mandate on software, data elements, etc. So it's very difficult to integrate case information."

he says. "Our first step is trying to fail commonalities, like find a specific, unique ideotifier for an offender." Nevertheless, Basto expects to have Nevertheless, Basto expects to have for the properties of the properties tion in place by method to the properties to a place by the basto expects of the publical Intelligence, will be implemented with the Business Objects XI suite. It will use XML for tagging and soring data used by the court's case astrong data used by the court's case and the properties of the properties of the properties also be used for parting document content. The Business Objects SA soft-

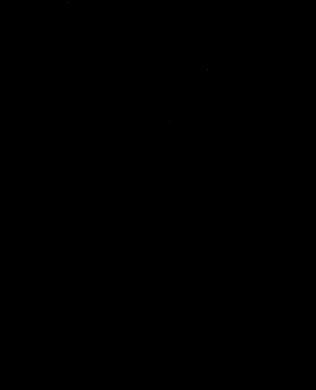
ware will give Georgia's judiciary a single reporting, query and analysis tool layered over existing applications. Basto says be believes the benefits of consolidating court reporting and analysis applications will be substantial."There

are seveo levels of courts, numerous court-related agencies and offices, as well as several executive and legislative agencies that could use this information."

For example, with BI, court administrators could more easily spot problems. "They could pull statewide case-load statistics, for instance, and analyze them in order to make a case



# Central Intelligence



# TECHNOLOGY



#### **GPS Repositions for Business**

GPS technology is most commonly found in consumer goods like cars, cell phone's and handheld navigation units, but it's starting to mature and is increasingly used in enterprise applications in both the public and private sectors. PAGE 30

#### Semantic Web

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#### SECURITY MANAGER'S JOURNAL Zero-Day Infection Is Headed Off Efficiently

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ware, data elements, etc. So it's very difficult to integrate case information," he says. "Our first step is trying to find commonalities, like find a specific, unique identifier for an offender." Nevertheless, Basto expects to have

Nevertheless, Basto expects to have the statch hirst integrated BI application in place by the end of this year, the properties of the state of the state loads and the state of the stat

analysis tool layered over exist applications.

Basto says he believes the benefits of consolidating court reporting and analysis applica-

tions will be substantial: "There are seven levels of courts, numerous court-related agencies and offices, as well as several executive and legislative agencies that could use this information."

For example, with BI, court administrators could more easily spot problems. "They could pull statewide case-load statistics, for instance, and analyze them in order to make a case



pite the lack of a state mandate. JORGE BASTO expects George's courts to analyse effect fill apply shows by year's and

Central Intelligence

for adding more indees," Basto says But trying to impose a single reporting sucrying and analysis tool on any betermeencous posserubically dispersed operation is likely to be difficult. So it's no big surprise that few enterprises currently have a single BH system. One of the downsides of movone from individual tools to consolidar. ed Bl is that not all men, want to use a

new application "In peneral, standardizing on a single BI platform is a good idea," says Kurt Schlegel, an analyst at Stamford. Conn.-based Gartner Inc. "However few organizations have actually done it. Most are hampered by the political realities of replacing a tool from existing projects, all in the name of stan-

dardization." According to surveys conducted by Forrester Research Inc. in Cambridge Mass., most large organizations have between five and 15 different reporting and analysis tools. So consolidation means "taking away those technologies that users feel are most appropriate for their tasks," says Keith Gile, an analyst or Economics

#### Combining Functions

Consolidated BI products combine functionalities such as poline analysis cal processing (OLAP), data mining standardized reports, custom report peneration, end-user querying, visual analysis tools, and executive dushboards and scorecard functions, which are used for tracking key performance metrics. BI may also include extract, transform and load tools for moving data into a data warehouse, and integration adapters for connecting directly to an application or database Generally, though, BI offerings fall into one of two distinct categories: data mining/analysis or business reporting

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Another reason for bringing in a BI system is long-term cost savines. With a single platform, you can take advantage of eaching and cluster ine land! blade technology," says Gile. There really is an economy of scale to managing one BI environment.

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nd Bil prodi

"Organizations want a Mr. James view of their customers, employees and processes - and usually they have to pull that from multiple databases," says

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custom applications used for reporting and analysis. The result was a unified reporting system that could identify trends and provide historical data as well as a balanced scorecard to compare Mueller's corporate results with its goals and industry best practices.

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oppose it Employees at The Hillman Group Inc., a \$380 million manufacturer and distributor of engraving hardware. were "starved for information" before the company introduced BI tools, says fim Honorkamp CIO at the Concinnati-hased company. "The company has grown dramatically and that outstripped IT's ability to deliver informa-

Hillman Group purchased Information Buildon Inc 's Wah From onton prise Bl product and connected it to a I.D. Edwards back-end system and two custom applications. The company uses it to analyze financial data such as customer orders and costs and plans to use it for generathic analysis to certi-

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#### accurate results, he says. **Customer Pressure**

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"It was really about client retention." says Bradley Maue, vice president of IT and systems development. "A few of our large customers knew what these kinds of tools could do and started ask-

Now clients can access and analyze fees and other invoice-related data stored in an Oracle data warehouse

They can use the Oracle BI tools via the portal or import the dara into their own Excel spreadshoets

Stuart Mauc's employees are also using the tools to provide better analysis and auditing for customers, "It's a big step up from the old days," says Maue. "In the pre-BI period, statistical analysis was minimal, and it would be in a spreadsheet. And the database could only produce reports based on codes." At Florida's Broward County School

District, the sixth-largest school district in the U.S., the goal is to provide teachers and administrators with "fingertip access to data that enables better decision-making "says Phyllis Chasser, the district's senior data warehouse analyst. And as of last year that goal had been largely met, thanks to a Web-based BI portal that enwides school employees and parents with access to information on school opera tions and student academics. Teachers for instance, can drill down into an individual student's attendance records and grades, and narents can track their children's progress.

The idea for the system, which is based on Hyperion Solutions Corp.'s Business Intelligence Platform, was

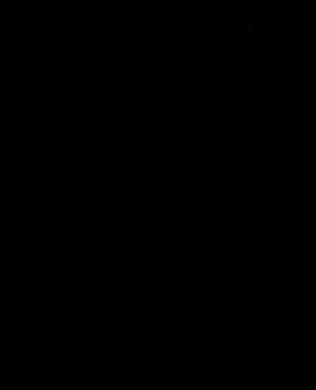
## pen-source BI

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cost half a million to get your first by

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for adding more judges," Basto says. But trying to impose a single reporting, querying and analysis tool on any heterogeneous, prographically dispersed organization is likely to be difficult. So it's no big surprise that few enterprises currently have a single RI system. One of the downsides of movine from individual tools to consolidate ed BI is that not all users want to use a

new application "In general, standardizing on a single BI platform is a good idea," says Kurt Schlegel, an analyst at Stamford, Conn.-based Gartner Inc. "However, few organizations have actually done it. Most are hampered by the political realities of replacing a tool from existing projects, all in the name of stan-

dardization. According to surveys conducted by Forrester Research Inc. in Cambridge Mass., most large organizations have between five and 15 different reporting and analysis tools. So consolidating means "taking away those technologies that users feel are most appropriate for their tasks," says Keith Gile an analyst at Forrester

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# pen-source BI

first conceived in 1996, when administrators realized that the district but loads of valuable data on hundreds of AS/400s scattered around various locations but no quick way to run reports

"You had to make a request and wait for someone to write a program or run a report," says Chauser, "A week later. you might have the information, but it was already half outdated." With the belo of an IBM Reinwent.

ing Educatioo Grant, Broward County moved its data off of the AS/400s located at the schools and onto a centralized database on an IBM iSeries server. with a Hyperion Web-based portal for access to the information.

Broward chose Hyperion, says Chasser, for its ease of use, particularly for nontechnical and semitechnical users. While most people use a Weh interface to find information, more sophisticated querying and analysis is done via the

full client interface Making data readily available to employees was also the goal at Blue Cross and Blue Shield of Kaosas City. The health insurer implemented Business Objects XI, which has an "lotelligrot Question" feature that enables users to create queries by navigating a series of

drop-dowo menu choices. "It's a guided question," explains

Erik Brokaw, enterprise system architect at Kansas City, Mo.-based Blue Cross. "So, for instance, if a vice president wants to know the too 10 employer groups by revenue for the last quarter of 2005, he can use the meou. As he makes selections, the question changes as well."

#### Web Services and BI

Once BI suites become more mair stream in large organizations, some companies could find themselves with competing BI products. That's especially likely in companies engaged in mergers. Therefore, open standards and Weh services are seen as key to ensuring long-term BI compatibility.

Desmond Lownds, a software engineer in the architecture group at CHG Healthcare Services, a health care staffing firm in Salt Lake City has steered clear of proprietary BI products for fear of not having enough support for open standards

Instead, CHG uses JasperSoft Corn.'s open-source lava-based reporting tools and a custom Java Web application that displays indicators pulled from an AS/400 transactional system and a data warehouse. Lownds also expects to implement the open-source Pentaho Business Platform for additional re-

porting and OLAP functionality. \*Our infrastructure has to be adapt able," says Lownds, "We've had four mergers in the past few years and ex-

pect more." BI vendoes are acknowledging that concern and have moved to add sunport for Web services, says Forrester's Gile. He says BI companies that have started to move in that direction include Cognos, Hyperion, Information

Builders and Actuate Corp. Thus, BI suites may be open to mix and match purchasing from organizations looking to let different user groups have their best-of-breed tools. "By exposing more functions with Web services, they're making it easier for their products to fit in with SAP and Oracle and IBM applications," Gile

says. "So you can pull your RI nieces from wherever you want. That's a fundamental change from three or four years ago." Ventana's Rogge agrees: "We will he seeing more out-of-the box data integration than before, and one way is through Web services."

Hildreth is a feedance FT writer in Waltham, Mass, She can be reached at suc hildreth@comcast net

#### BIG OIL PROFITS WITH BI

Tables County contines business entiligence and market prescience to turn steel sate a groft leview w the of relative See seen 42.

Ricoh color rocks, Stan.



You act like they gave you the award, Jerry.





T'S NOT uncommon to see politicians giving voters a snow job. But in this case, an elected official was done in by one. Several feet of snow buried the city of

Chicago in January 1979, shutting down much of its transportation, Jane Byrne, then a little known politician, successfully used the city's failure to clear the streets as a campaign issue, unseating a two-term mayor. It's not surprising, then, that when the city began installing Global Positioning System equipment three years ago to track vehicles, snow plows were among the first to be equipped. With GPS, city officials can see where the plows are, what streets bave been

cleared and whether the plows are following assigned routes correctly. Today, Chicago tracks 1,200 mobile assets, and another 4,000 are scheduled for next year. The technology facilitates improved service levels, heightened security, greater efficiency, and faster restonses to visuations such as potholes and sewage problems.
"Not only can we look at real-time dispatch," says Molly Mangan, the city's deputy CiO, "but we can analyze

city's deputy ClO, "but we can analyze where our vehicles are, how long they were sliling there waiting for materials and how we might make our existing routes more efficient." For Sears Holdings Corp, in Hoffman Estates, Ill., location is a key element in managing its 11,000 appliance service trucks nation wide, says Steve

Jones, national routing manager for

Sear's product repair service Recently the company implemented a space me called the Sear Smart Toolbox, with a replication co-orderoped by Sears and Redland, Calif.-based Environmental Systems Research Institute Inc. (ESRI). Each truck is equipped with a rugge-diazed lapop from Bronis Corp., that uses GPS along with cellular, astelline with the company of the com

GPS

**FOR BUSINESS** 

Global positioning system technology is making a gradual transformation from consumer toy to critical tool for solving targeted business problems. hal turn-by-turn directions from one work site to the next. It also reports the vehicle locations to the back-end ESRI ArcGIS system and the jointly developed Computer Aided Routing System so that workloads can be adjusted and technicians rerouted during the day. The navigation system has cut

driving times by 19% to 20% and has boosted the number of customers each technician visits from 8 to 8.5 per day.

according longs "Technicians don't have to look at maps, don't have to call the customers

for directions and don't get lost," says Dave Lewis, ESRI's project manager for the Sears installation. "When you are talking about 11,000 technicians even if you save them 10 minutes a day. it is a buge ROL"

#### **New Applications**

Once limited to military navigation GPS hardware has blossomed into a \$15 billion-a-year commercial business that will reach \$22 billion in the next two years, according to ABI Research in Oyster Bay, N.Y. While much of that is tied up in consumer goods like cars. PDAs, cell phones and handheld navigation units, the technology is mature and is finding increasing use in busi-

ness applications. "GPS has a huge potential to create new business models and applications we don't have today," says Gartner Inc. analyst Thilo Koslowski, who is based in San Jose. "Once you capture GPS information and put some intelligence behind it, you will not only be able to assess the situation in real time but [also]

make assumptions about the future." One example he cites is the tracking of vehicle movements throughout the year as a method of determining fleet insurance rates. Traditionally, insurers charge flat rates based on the number of vehicles and miles driven GPS makes it possible to add more precision to rates by analyzing factors such as total mileage per vehicle, ZIP codes where each vehicle is driven and parked, and vehicle speeds.

But in most cases, such applications are still on the horizon. From an enterprise standpoint, outside of tracking vehicle fleets, most commercial organizations don't need to continuously monitor the precise locations of large numbers of assets over a broad area Alternative technologies, such as

RFID or Wi-Fi triangulation, can be used to track assets within a warehouse, store or hospital. But there are niche applications where GPS technology is proving indispensable particularly in utility management,

#### AT A GLANCE

## **GPS** TECHNOLOGIES

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------Navetar OPS: The original 6PS system from the U.S. Department of Defense, it consists of a majorum of 2d satellites whition in few orbital cloner at an elevation of 11,000 miles, along with pround-control stations. GPS receivers trianquiste a location based on signals sent out by the fittes. The system is accurate to within

22 meters horizontally and 22.7 meters. vertcally ------------Differential GPS: This system was developed by the U.S. Coast Guard to improve accuracy to the 1-meter range. It does this by supplementary the satellite sionals with ground-based signals. Differential Carrier APS- Head or

I surveying, this method delivers accuracy I to within milimeters, it uses a have station and a remote recessor, generally within 16 miles of each other, which both track the same signals at the same time Glenass: The Russian Souce Forces rus

tern is similar in Navetar Some deutres receive signels from both the Newster and Gloness satelities, providing greater relishifty and accuracy than young a sunder netter. -----------

Galileo: This new 30-satelies European civilian system is expected to be kely on enstanol by 2008, offering accuracy of up to I mater. The first satellite was launched on Dec. 28, 2005. In addition to transmittino positionino signals, satelites wili also receive and retransmit distress sexuals by ---- | search-and-rescue operators - DRFW RORR

homeland security and agriculture. Public-sector apencies are taking the lead in the use of GPS because they are generally responsible for a benader physical area - a town, county, state or nation - than are commercial en-

In homeland security, GPS is used to track shipping containers as they enter or travel around the country and limit the areas where dangerous cargo can travel - a technique known as gee fencing. For instance, the city of Chicago uses GPS on fuel tankers. When a tanker goes outside of its territory, the ignition is disabled. Similar systems are used in the nuclear industry. GPS is also an integral part of bio

terrorism protection, says Mark Smith epidemiologist at the Guilford County Department of Public Health in North Carolina and head of the county's Public Health Regional Surveillance Team 5. With a grant from the Centers. for Disease Control and Prevention. he oversaw development of a means of rapidly assessing health threats

"The overall problem was to increase the speed with which we could collect the data and get it analyzed where there is a potential bioterrorism event," explains Smith.

The system consists of a wireless aptop base station and a series of wireless handhelds - either iPags

from Hewlett-Packard Co. or Avims from Dell Inc. - with GPS cards from Globalsat Technology Corp. in Tainei It routes people to the field locations where they need to conduct health surveys. Surveyors fill out customized forms, and address information is inserted automatically, based on the GPS

conrdinates. The handhelds wirelessly upload to the lapton for analysis osing ESRI's ArrView 91 and the CDC's Eni Info epidemiological analytic software. "We can do the analysis right there in the field if we need to," says Smith. The main large-scale use of GPS. however, still lies in the area of fleet

management and dispatch, and it can be used with other location-tracking technologies. In the city of Chicago, vehicles are tracked and signals are cent to bend gaarters every 30 seconds via a variety

- - - - of wireless routes. The city's location transmission system is designed to be vendor-neutral. Most of the vehicles use GPS transmitters, with the signals going to servers at location-tracking firm WebTech Wireless Inc. in Burnaby British Columbia, before being forwarded to the city's own servers. Some older vehicles use radio frequency triangulation technology. In addition. mobile supervisors' cell phones are tracked using GPS or cellular tower triangulation

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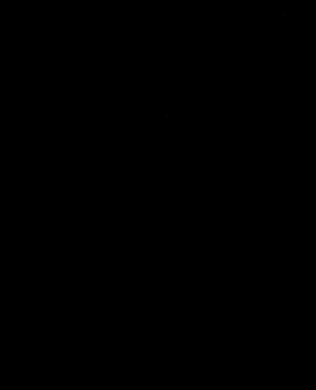
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technicians' ability to service more clients. In other cases, such as Guilford County's bioterrorism task force results are hard to quantify, but the orga nization is able to respond faster than it would without GPS technology. Chicago lies somewhere in between Right now, the city is incurring the expense of installing the equipment and setting up the vehicle monitoring

and it doesn't expect to see a financial return for a few more years. "Eventually, you will get more efficiency, more accountability and more information at your fingertips," says Mangan. "For the first couple years, when you are buying all this equipment, it is an investment. But once you have the infrastructure set up and you

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Robb is a freelance writer in

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# Semantic Web

DEFINITION

The Semantic Web is a visionary project that aims to enhance the usability and usefulness of the Web by enabling computers to find, read, understand and use the content of Web documents to accomplish tasks via automated agents and Web-based services

BY RUSSELL KAY

THE VAST AMOUNTS of computerized data contained on the World Wide Web finchading the Deep Web; see QuickLink a8030) would arpear to be the largest body of information ever assembled. Certainly, the Web is a uniquely valuable tool for both research and the dissemination of Here and knowledge But the fact remains that the Web has been remarkably resistant to direct, effective efficient use by computers Web pages are designed to be read by people not machines-

view the labels of hyperlinks Tim Berneral ex-thu Oxford University graduate who invented the Web in 1989, whate the first Wah brown as and server in 1990 and currently directs the World Wide Weh Consortium - has a much grander vision for the Web of the future, which he ealls the Semantic Web

therefore, the meaning of the

people who look at Web renov

content must be inferred by

read HTML documents and

The Semantic Web adds a metadata infrastructure of tags to define elements of information within Web pages linking them so computers can extract meaning from widely separated data as easily as the Internet currently links indi-

The Semantic Web will make it possible for machines as well as people, to find, read, understand and use data over the Web to accomplish useful tasks. The Semantic Web will extend, not replace, the Web as we know it today. In some instances we already use specialized software to work with carefully identi-

fied Web data, but this is the exception, not the rule. It takes people to surfate Web abox online, make sense of scarch-engine results and decide which addi-

tional links to follow The Semantic Wah once it becomes a functioning reality, will let a user bunch an acent or process that will then proceed on its own, perhaps checking

back with the user periodically as the work progresses The Internet was originally created as a way for research ers to easily exchange comouter data with one another. Prople could transmit files

using fundamental methods such as file transfer envisored Although data traveled across the Internet in the form of hits and bytes, the basic unit of meaning, as far as the compater waters were concerned was the file

That channel when the Web came into being Berners-Lee built his Web around power. which are documents written in HTML. A versatile language, HTML combines interactive forms, text and multimedia objects - such as images and sound - and it describes

how these elements should be presented and what the overall name should hask like Unfortunately, HTML has

a very limited ability to classife the blocks of text on a page, apart from the roles they play in a typical document's organization and in the chosen

As Web use grew, HTML's limitations led to the development of XML and XIJTML

which began to offer mechanisms for adding meaning to Web pages. The Simple Object Acress Protocol and Web services bacama a continu making it easier for news and even automated processes to stather specific information or perform specialized functions across the Web.

When the Semantic Web comes to fruition, software will be able to locate informs tion within Weh pages, thus breaking through the document level and accessing real data that it can use directly. In one sense, the Semantic Web will become a kind of global database

Making Machines Smarter In an age when grandmoth-

ers and kindergartners use computers and surf the Web. it's cometimes hard to recell just how much direction or guidance a user has to give a computer to accomplish anything. Machines can't use partial information, they don't know what's inside an image or graphic, they're not much good at making analogies or combining information from

different sources, and they don't have a big vocahulary. We can easily use the Web to look up a Computerworld article or blog, locate a piece

buy a book, locate an eve doctor near our workplace or put out a question on a chat furum or bulletin board. But mile your computer to do the same thing, and it won't know where to start unless you give it a detailed, correctly spelled series of commands and responses in the proper sequence.

For example, using HTML and a Web browser, one can create and present a catalog page of items for sale. But HTML has no inherent canability to know that, say, Item No. IGI896 is an Acme wideet with a retail price of \$995, All HTML can specify is that the text "IGI896" should be nositioned near the text "Acme widget" and "\$9.95."

HTML has no way to enpress or know that "Acme wideet" is a kind of consumer product, that "\$9.95" is a price. or that these pieces of info mation describe an item that is distinct from other items listed on the same page The Semantic Web will rela-

dress that by enabling comput ers and software to find next understand and use informa tion contained inside Web documents to accomplish use ful tasks via automated arents and Web-based services 1

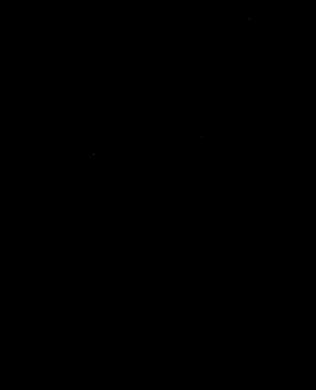
Kay is a Computerworld contributing writer in Meanware Mass. You can contact him at russkawiicharter met

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#### Components of the Semantic Web

SEVERAL STANDARDS AND TOOLS	



# Semantic Web

#### DEFINITION

The Semantic Web is a visionary project that aims to enhance the usability and usefulness of the Web by enabling computers to find, read, understand and use the content of Web documents to accomplish tasks via automated agents and Weh-hased services

THE VAST AMOUNTS

of communerized data contained on the World Wide Web (including the Doon Walt con QuickLink a8030) would appear to be the largest body of information over secondard Certainly, the Web is a uniquely valuable tool for both research and the dissemination of ideas and knowledge. that the fact remains that the Web has been remarkably resistant to direct, effective. efficient use by computers Web pages are designed to be read by people, not machines; therefore, the meaning of the content must be inferred by people who look at Web pages. read HTML documents and

view the labels of hyperlinks Tim Berners-Lee - the Oxford University graduate who invented the Web in 1989. wrote the first Web browser and server in 1990 and currently directs the World Wide Web Consortium - has a much grander vision for the Web of the future, which he calls the Semantic Web

The Semantic Web adds a metadata infrastructure of tags to define elements of information within Web pages. linking them so computers can extract meaning from widely separated data as easily as the Internet currently links individual documents

The Semantic Web will make it possible for machines. as well as people, to find, read understand and use data over the Web to accomplish useful

tasks. The Semantic Web will extend, not replace, the Web as we know it today. In some instances, we already use specialized software to work with carefully identified Web data, but this is the

exception, not the rule. It takes people to surf the Web, shop online, make sense of search-engine results and decide which additional links to follow. The Semantic Web,

once it becomes a functioning reality, will let a user launch an agent or process that will then proceed on its own, perhaps checking back with the user periodically

as the work progresses. The Internet was originally created as a way for researchers to easily exchange com puter data with one another. People could transmit files

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gather specific information or of music heard on the radio

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Kay is a Computerworld contributing writer in Worcester. Mass. You can contact him at russkav@charter.net

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such as file transfer protocol. Although data traveled across the Internationals of the form of bits and bytes, the basic unit of meaning, as far as the compater systems were concerned was the file.

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Our manager's team focuses on eradication a virus, but what's taking the antivirus vendor so long? By Mathias Thurman

830 our 11 deverment has an operation. And status meeting. All the managers have a chance to review changes to the infrastructure and can raise their own concerns, for example the data center operations manager discusses any major change controls scheduled for the day and reviews

the Priority () and 1 issues from the rost 24 hours. We also track lade desk calls and virus tickets Normally about five to 10 virus

tickets are open on any given day That's not bad, omsider one that we have over 0.0000 combusts worldwide Vacterday, though, the operations meeting was out short by an explosion of virus-related help desk tickets. Within 30 min utes the belindesk recorded JO virus related calls, and the number was increasing rapidly It seems dithat a considerable

It part difficult to become infected with one. Employees who are Web-based mail such vertently deventood malacions made to their workstations has corne that mult isn't scanned the way courlesces: Exchange take not after employees conmost their lantons to a broadfound connection at learne and then come back to the network

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help desk pussed the MAC all dress of the system to the notwork appraisate group, which would disable the switch mort Finding the MAL address is fairly case in our environment The treachine name of nearly all our dealtons is the best letter of the employee's first name followed by the treat six often soften of his last money So, starting with an e-mail address of orborn or forceample the help desk simply is: sites the obestar", a nothermal tudetermine the MAC Allego of the corresponding system.

Then the network team can travelle MAC allows to the appropriate soutch port and is able the port. Meanwhile, we isolated a

> Within 30 minutes the help desk received 40 virus related calls.

n to our antivirus provider. Frend Micro Inc., for analysis. After three hours, Frend Micro sent us a pattern ble for detecting the virus, and much later it gave us a working 15t life, which actually circus infected systems. Thus a thin first over minn a close had no to a the vendor's researchers mazerodn at ukwennio but if this is typical of the time

st well take. Of he lookage for mother on is true conduc-Other Tools

While we were waiting, I identified all the tools we had available that could help Actor mine the or tent of the infeetion and elements of its activity. These tools assuld also help us know when we could consider ourselves below antin and so resume narmal

Interestingly, our antivirus senting gateway (from Proofpoint Inc. in Capertino, Calif.). which monitors all incoming and most outgoing c-mail. was detecting the infected mail, and we were able to use it to help identify additional infected workstations. Unfortunately, anyone who points a mail client at our internal SMTP releasor external mail relays can be pass the Proofpoint servers, so infected must was able to get outside the company, and we heard from

other communes that were infected because of us. Our firewalls are another

useful tool. Since this virus through our tirewall logs for excessive Port 25 connections stations pinpointed this was were infected. Nearly 12 hours after our

daily operations meeting had been alruptly adjourned, we finally were able to push Trend

Micro's undated parties file and more important the I's file to approximately 70% of orest an adoption. CT has not have likely were systems that hadn't come on the network most likely became they were us due on time cones l

To validate that except hing on marking time as a mod several tools, starting with the firewall loss. We are vainreficent drop in Port 25 traffic. which was the main voctor this particular warmsmed to make new infortions. The Beaut point loss also should that things were improvemently number of infected e-mails had fallen from 2.700 to 28. Now help desk tickets had dropped from over 100 to H. We even brought an infected desktop into the lab and edidon tiles it was clean by checking than certain files had been removed

from the temp directory and by installing Etherval to fox nacket sniffer) to ensure that the workstation wasn't weneratine Part 25 traffic When it was all over, I considered us lucky, since only a small percentage of our desktops were hit by this mali-

cious code. One change that this zero-day meident brought about is that I edited the security policy to restrict emplences' use of external mail nelses. Unfortunately, these pestrictions can't be absolute: a couple of executives in the company want to be able to use SMTP mail relays, I put some best-practice anidelines together for them. My hands may be tied, but I want to at losst provide some compensat-

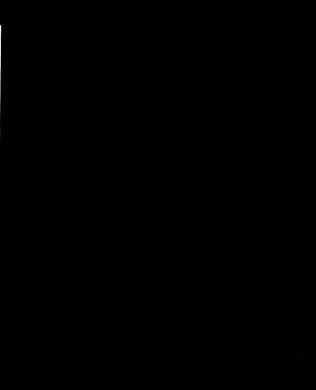
ing controls Overall, Used that the incident response process worked well. There's always some tuning required, though and that will be addressed during the postmortem •

#### WHAT DO YOU THINK?

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## SECURITY LOG

REAL DIGITAL



# **Zero-Day Infection Is Headed Off Efficiently**

Our manager's team focuses on eradicating a virus, but what's taking the antivirus vendor so long? By Mathias Thurman

VERY MORNING of 8:30. our IT department has an operation. al status meeting. All the managers have a chance to review changes to the infeastructure and can raise their own concerns. For example the data center operations manager discusses any make change controls scheduled for the day and reviews

the Priority 0 and 1 SECURITY issues from the past 24 hours VINIALKS We also track belo

desk calls and vines tickets Normally about five to 10 virus tickets are open on any given day. That's not bad, considering that we have over 6,000. employees worldwide Yesterday, though, the operations meeting was out short by an explosion of virus-related help desk tickets. Within 30 min utes, the belo desk received 40 virus-related calls, and the

number was increasing rapidly It seemed that a zero-day virus had made its way into the It isn't difficult to become infected with one. Employees who use Web-based mail such as Vahon or Genail can inadvertently download malicious

ende to their weekstutions because that mail isn't scanned the way employees' Exchange mail is Infections can also take root after employees connect their laptops to a broadhand connection at home and then come back to the network with viruses in tow. As security manager, it was

important that I take charge and direct, monitor and manage this outbreak. First, we

had to get the infected machines off the network. One of the symptoms in this case was that the workstation would send mail with an infected attachment to a list of a mail addresses from its contact list This meant I could have the

ers and spot infected workstations. When one was found someone from the bein desk would call the user and have him disconnect the

workstation from the network When the uses warn't mulitable the belp desk passed the MAC address of the system to the net-

work operations group, which would disable the switch port Finding the MAC address is fairly easy in our environment. The machine name of nearly all our desktoos is the first letter of the employee's first name, followed by the first six characters of his last name So, starting with an e-mail address of mehurman, for examole, the help desk simply issucs the obtstat "-a mthurma" to determine the MAC address of the corresponding system.

Then the network team can trace the MAC address to the appropriate switch port and disable the port.

Meanwhile, we isolated a

it to our antivirus provider. Trend Micro Inc., for analy sis After three hours Trend Micro sent us a pattern file for detecting the virus, and much later it gave us a working TSC file. which actually cleans infected systems. This is the first occasion we've had to test the vendor's responsiveness in a zero-day attack scenario but if this is typical of the time

it will take. I'll be looking for another antivirus wender While we were waiting I identified all the tools we

had available that could hele determine the extent of the infection and elements of its activity. These tools would also help me know when we could

consider ourselves "clean" again and so resume normal activities Interestingly our antivirus scanning gateway (from Proofpoint Inc. in Capertino, Calif.). which monitors all incoming

and most outgoing e-mail, was detecting the infected mail, and we were able to use it to belp identify additional infected workstations. Unfortunately, anyone who points a mail client at our internal SMTP relays or external mail relays can bypass the Proofpoint servers, so infected mail was able to get outside the company, and we heard from other companies that were in-

fected because of us. Our framally are another useful tool. Since this virus spreads via e-mail, we combed through our firewall logs for

excessive Port 25 connections and then assumed that workstations pinpointed this way were infected. Nearly 12 hours after our

daily operations meeting had been abruptly adjourned, we finally were able to push Trend Micro's undated nattern file and, more important, the TSC file to approximately 70% of our systems. (The other 30% were systems that hadn't come on the network, most likely because they were in distant

time roper) To validate that everything was working fine we med several tools, starting with the firmfall loos. We saw a sign nificant down in Bost 25 truffic which was the main vector this particular worm used to make new infections The Devot. point loss also showed that things were improving the number of infected a mails had falleo from 2.700 to 28. New help desk tickets had dropped from over 100 to 11. We even brought an infected deskton into the lab and validated that it was clean by checking that

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#### WHAT DO YOU THINK?

The work's inversely written by a rea him at mathias, thurmonifyshoo.com, or ion the discussors in our security blog







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accolleration appliances. The
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contex and back while accelerating all HTTP and HTTPS traffic.
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now in three medies, the S-1000,
S-2000 and S-3000, starting at
\$15,000 each.

MARK WILLOUGHBY

# Graphics Pioneer Goes Back to the Future

T'S BACK TO THE FUTURE for computer graphics pioneer Evans & Sutherland, as the company divests its simulation business and returns to its origins in advanced algorithms and display technologies. In refocusing on its roots, ESS provides a model for other bourique technology companies that helped launch a marketplace only to see it mature into something unprofitable.

E&S was founded by a counie of professors and computer graphics pioneers, David Evans and Ivan Sutberland, in Salt Lake City back in 1968, before Microsoft, Intel, Oracle and Cisco existed. Their graphics skills produced 79 patents and many of the graphics technologies routinely seen in today's video games and design systems - solids modeling, lighting models, hidden surface removal, reflectance, render-

inoran, reactaine, relactaine, ing and display. Every time you see a teapot used so demonstrate some advanced graphics capability or performance, you can thank E&C. The company established the teapot as the de facto solid model for graphics benchmarks when demonstrating lighting models and reflec-

tance in the early 1970s. Many of today's household names in graphics — Pixar, Adobe and Sili-ton Graphics — were E&S spin-offs, including Singletrac Entertainment, which achieved cult status among gamers. Some dominant but less-well-known inche players, such as Tripos in molecular modeling and 3-10 design pincore CDRS, were also E&S spin-offs. The Disney movie Town was rendered on E&S systems.

E&S launched one of the original technology initial public offerings in 1978 and quickly established leadership and gained a devoted following in high-end computer graphics. The graphics skills led E&S into the marketpiace for military and commercial simulators, but the simulation business proved unfriendly for a company of graphics purists.

E&S has hemorrhaged cash despite the fact that 80% of the world's airline pilots maintain their skills on E&S flight simulators and that most military aircraft and helicopter pilots, as well as armored vehicle

drivers, earn their wings on the company's gear. E&S lost \$8.9 million in 2004 on \$60 million in sales, and a whopping \$36 million in 2003 against \$84 million in revenue.

"Market forces beyond our control made it difficult for us to produce consistent results," said E&S CEO Jim Oyler. "The nature of the commercial simulation business had shifted to where a few large companies called the shots. It was too risky an environment

for a small public company."

Oyler said the military market is consolidating to a few very large contractors. For example, avionics manufacturer Rockwell Collins is acquiring E&S's simulation business for \$71.5 million. Rockwell Collins posted

sales of \$3.5 billion and net income of \$396 million in 2005. "We're not exiting the graphics business," Oyler said. "A lot of the patents and things that people remember E&S for are not being sold. E&S didn't start as a simulation company. We started as a company to create high-quality computer graphics. We're still very much doing that "

doing that."

Despite the overlag between comDespite the coverage between comgrames. Opter said the future for £5.5 is
particle. Opter said the future for £5.5 is
not in creating more artificial worlds.

"Game developers do overlag with highregion of the company of a simulation is to make it as close at possible to the real world, not an artificial world like what's in a game. A
lot of game development creates play on the company of the company o

lations — demand ultrafast shading.

fill meas and readering, but the commercial stimulation world, especially millitary applications, has unique requirements. Oyler said games trypically have no need for real-world inputs such as serrain mapping, a vital feature for missions involving strained following radar anyigation. Games don't need to simulate real-world disputs some shading to the commercial contraction of the commercial contractions on high-performance inferred or ordar memors acquiring terretts, and they trypically do not simulate degraded capabilities like burtel damage, he said the against the said of the contraction of

The future for E&S lies in ultrahigh-resolution projectors for digital theaters and planetariams. "We'll be going back to our roots and working going back to our roots and working out the projectors of the planetariams." O'pler said. Eas have high root planetariams and curved surfaces, planetariams of the jarge displays and curved surfaces, be said. The next step for E&S could be in large displays and or flarry Putter to a surface of the planetary of the planetary of the said. The next step for E&S could be in an an enter alument or flarry Putter gotborhood, a move that will take the company back to its future. 1

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## COMPUTERWORLD

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# MANAGEMENT

#### Drilling Down

Valero Energy has combined business intelligence and market prescience to become a profit leader in the oil industry. Here's how IT supports it all. PAGE 42



#### Managers' Forum

Paul Glen has advice for project managers tired of taking the heat for lagging colleagues and unreasonable project schedules. Also, he discusses how much a manager really needs to know about the work his people do. PABE 44

#### OPINION Confessions of a

Full-Time Telecommuter
With more than a decade of telecommuting
experience to draw on, Barbara Gomolski
has some suggestions for those who would
run a virtual office. PASE 48



#### Collocating IT staffers with their business customers can be a win for your company.

#### BY MARY K, PRATT

UDITH SPITZ's tech department had to make work run smoother and faster as Verizon Communications Inc. moved forward with its customer service initiative. Verizon wanted customers who

Verizon wanted customers who called in orders or service requests to get great service quickly without talking to a rep, and IT had a major role in getting the job done. "Bast delivering the system was not going to cross the finish line for us," Spitz says, "The way we operate had to be different."

So Spitz, senior vice president of network systems at the New Yorkbased company, put her IT workers right in the call centers, engineering centers and dispatch centers. That way, they could see firsthand how to improve business processes.

"It probably saved our lives," says Mary Jane Johnston, who was then vice president for the fiber solutions center. "Their availability to us their willingness to understand our world—was tremendously helpful." (Johnston has since been promoted to market area president for the Potomac.

region.)
While many companies are struggling to get IT and business on the same page, Spitz and other technology

#### THE RIGHT TEAM. THE RIGHT WAY

RAMON L. VEGA a technologist of Piliter works sale by sale with areployees in the company's consumer marketing group as part of Pfizer's collocation policy. He's a proponent of the gractice, wit he sed others say collocation isn't not like every IT works

He and other people expenenced with this arrangement say the key to success is picking technical workers who understand humanus nonciples, can communicate effectively and display the interpersonal skills. that make others comfortable. It's having the notif team, became the

noted and syckests doing it." Wrose start. Even with the right people, companies will still encounter personnel chellenges, Debra Rice, IT applications director at Well-hint control a lot of authorithess among employees initially when she moved technotions workers into the HMO finance department to jump-start a major protect. "There is a level of Sknoticists" among IT workers when they're asked to spend more time with business people, she says, "And it takes some successes in working this way for people to see the visite and to

And IT managers need to make sure that their employees who have een assigned to business departments don't feel abandoned saws Kavin W. Moody, executive director of the Center for Information ragement Studies at Babson College, Cross-pollination with the ness is useful for IT workers, but leapping in close touch with their IT

peers is also assential You have to provide for their careers," Moody says, noting that tech corkers learn from one another and feed off of one another's creative energies. They have to be linked into their own community

- MARY K DOATT

#### THE PRICE YOU PAY

DEBRA RICE but on success when she decided to out her IT workers and linance folks together in one spot, but she didn't have to gamble ner on her decision. Rice, IT applications director at WellPoint, a health benefits comp simply put the IT workers in a conference room on the floor occupied

by the HMO finance department in the company's California facilities. Although Rice doesn't know precisely how much this setup cost to implement, she says "it was fairly minimal." The space was already wind, so the only expenses came from moving computers and phones into the more

vover, she saws, "the costs were overshadowed by succ The expense of collocation and other strategies that put IT and es unit workers together can be minimal, as in Rice's case, or it can be significant, experts say. So before you implement any staffing noss, you should try to anticipate and analog the costs and order tial returns of these alignment strategies.

Collection is "good to do: it's just a question of whether (compani we resources to do it," says Rick Swanborg, a professor at Boston Internativ's School of Many ment and president of long inc. a peer-to-

peer advencry firm in Bosto Some plans, such as Verizon Communications' policy of putting (T staffers into cartain work areas to observe, will take those IT workers away from tanks that produce more immediate productivity results - a factor that makes the cost-benefit equation more difficult to compute. Judith Spitz, Vertzon's senior vice president of network systems, sens he cost of "downloading IT to the field" was "not a huge inver-And although Spitz says she hasn't calculated firm ROI figures, she has

no doubt that the returns on this investment by outer

MARY K. PRATT

executives are finding success by putting them together. They have not IT staffers and their business eartners side by side to develop a better understanding of one another's jobs so

they can deliver better products In 2004, Debra

Rice, IT applications director at WellPoint

Inc., an Indianapolis-based health benefits company, was in charge of a multiyear, multimillion-dollar project to rewrite the software that handles payments to health care providers. After watching the effort flounder for a year, Rice says, she moved her IT workers in with finance io April. "It was very important to make sure both sides understood what we were point for "Rice says, "There's a different

sense of team because we're situated together." Now, with IT on the scene rather than silved 15 miles away, the two groups are talking more reviewing plans and answering questions in real time. "You can't do that on the phone or in c-mail," she says. "That's probably our biggest gain - that we don't have to repeat. We do it right together the first time

Rice reports that the project is back on track, and three recent milestones were reached on time and within budget. "I don't thick we would have achieved them if we were not collocating "she save

Together All the Time

Such successes have pushed some companies to employee collocation all the time. Take the case of Pfizer Inc. The New York-based pharmaceutical company has had its operationsoriented IT workers embedded with business divisions for more than a decade

"Once technology started to be viewed as something that could give a competitive advantage, it had to be closer to the business units to understand priorities," says Fred Bennett Pfizer's director of operations

So every Pfizer corporate function, few sales to finance to marketing, has at least one staffer from the company's business technology group physically working within the unit. a setup that promotes more interaction and teamwork, Bennett says.

"Collocation allows us to better understand our client and their challenges," adds Ramon L. Vega, a director/team leader in the business technology group

Vega works with Pfizer's consumer marketing group. He says collocation heles him understand what marketing wants to achieve and how IT can support those goals. "When you have the siloed IT away from the client, you look at it as a commodity. You fill requests," he says. But with collocation. Vers says, "you are involved in the creation or

#### THERE'S A DIFFERENT SENSE OF TEAM BECAUSE WE'RE SITUATED TOGETHER

Putting IT east members with the business units they serve ion's a newal portion experts say. But the practice isn't employed universally either "If IT has little to do with strategy, you'll find ITT workers) sitting off to the side," says

definition of the busi

ness strategy from the

beginning," (For more

on Pfizer's eligement

strategy, see "Natural

Alienment," Feb. 6.1

Kavin W. Moody, executive director of the Center for Information Management Studies at Babson College in Wellesley, Mass But as IT departments become more strate gic. IT executives will - or at least abould look for ways to make the exchange of knowl-

edge between their workers and the business people more effective, Moody says. For example, Spitz found that her IT depart ment needed closer links with the business as Verizon installed fiber-optic networks linking homes and businesses to the company's net-

profe. The project demanded impossions that the traditional arrangement - IT folks meeting but not necessarily interacting regularly with business counterparts - didn't promote Codes com "We understood that we [needed] very, very high flow-through," she says, meaning that

there should be very little human intervention in processes such as ordering, provisioning and managing problems. "We had to get the hands out of the process and let the software do the work," she says.

So Spitz started putting IT workers in service centers to observe customer service rens on the job. "We sit next to them and watch what they're doing, and we're watching [for] user error' - where they're not using the system the way it was designed to be used. We ask why," she says. Spitz points to two systems that have been

implemented since this staffing shift. One allows workers to track service orders as they move through the pipeline; the other analyzes the network capacity of husiness customers who want to know if their existing networks can handle additional loads. Both systems drastically reduce the time workers spend manually completing the requested tasks Spitz says her IT staffers couldn't have doveloped either system so quickly and combeasively if they hadn't experienced the initial problems firsthand. 'It would have taken

longer until the problem was raised to IT," she says, "and the system solution would have been half of what it ended up being." Pratt is a Computerworld contributing writer in Waltham, Mass. You can contact her at

marykpratt@verizon.net.



# DRILLING DOWN

Valero Energy's business and IT smarts have made it one of the most profitable players in the oil field, BY THOMAS HOFFMAN

VALERO

LOCATION

BUSINESS

2005 REVENUE

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ns out makes hig money, but not all high of companies are the same. Valere lettery Corp's status as one of the worlds most probable pervechemical companies is largely a result of its willmentes to buck the status sup and appels

to strengthen its strategic decisionmixing and operational management. Must oil companies refine light, weet crade dit, which contains fewer soften and metals and to theaper so soften and metals and to the top of the care of the contains of the contains and the contains of the contains and the con

a strong mix of business and IT says y

higher profit margins in in countries. As economic expansion in countries such as China and India has fueled increased plobal energy consumption, Valero's best on heavy, sour crude "has placed it in the cutsled's seal," says. Eadel Ghier, an oil analyst at Oppenheimer & Co., a New York investment

brink. That strategy has elevated San Antonio-based. Valent from a relative unknown with just one refinery in 1997 to the biggest off refiner in the U.S., with 16 domestic and two

international facilities.
Valero, which was
named after the Alama
buluse official name was
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de Valero), finds itself in
this enviable position because it was "we quick to
recognize the [heavy, sourcruded trond—well but

fore the rest of the market," says Gheit. This has been a critical advantage for Valero, he notes, particularly in an insdustry that relias heavily on business intelligence GBD to quickly sift through real-time market data to price energy products emittably

For years, executives at Malenshare used Bl mole to prove over disk, weekly and monthly reports from its SAJEERP system. The reports from its SAJEERP system. The reports holy them optimize profitability across the hundreds of crade oil. Jiaqual propane and gasoline products it sells in several thousand locations, says Hal Zeech. Valero's senior vice predicted of information services and continues.

"I don't know any other Jenergy] companies that have this depth of daily lyseus of profit and loss activities], and I've done a fair amount of checking." says Zeich.

Valench use of 81 doesn't stop there, but the past three years, maintenance saffers at its refuncies have been using handheld devices to test the temperature and vibration levels of equipment, says 'esch. The information is uploaded to a central repository, where maintenance managers analyse the readiness

to determine whether a piece of equipment might require preventive main-

tenance.
Such attention to detail has enabled Valero's refineries to run at roughly 92% of capacity abound the clock. says Zesch. That's in line with the rest of the U.S. oil industry, says.

line with the rest of the U.S. oil industry, says Gheit, who places the industry's average refinery capacity at 90% to 92%, Still, Valero's focus on operational efficiency

helps capitain why CFO magazine last year ranked the company as the most profitable spender among all US, perinchemical firms. The study, prepared by Waltham, Mass-based consultancy IPITM, ranked the 10 largest companies in the most capital-intensive industries by their adjusted return on cross fixed posts.

#### Fueled by Functionality

For all its success with Bl. Valero isn't resting on its Lurchs. It's in the midst of volving its Bl strategy. In April 2004, the company launched a project to consolidate its user of set Bl book from vendors such as SAS Institute Inc. and Orsele Corp. and shift its operational front end reporting onto Information Builders, the 's

WebFocus reporting tool. The consolidation effort, which is targeted for completion by midyear, saved Valero an estimated \$191,000 in software licercing fees in 2106 and is expected to save \$478,000 more this year, says Kirk lewitt the compane's

director of reporting and financial systems. Although Valends previous use of redundant BI tools may seem excessive, it pales in comparison with that of most large organizations. On average, big companies use at least 15

companies use at least 15 Bl packages throughout their hustnesses because of acquisitions and decentralized purchasing among departments, says Keith Gile, an analyst at Forrester

partments, says Kelth Gile, an analyst at Forrester Research Inc. In fact, one of Gile's international government clients is using 22 different 81 tools, he says.

The shift to WebFocus has also provaded Valero executives with greater functionality than they had before, says Hew lit. Managers can now drill down on line-tiem budget information to analyze, for example, whether a promotional campaign for retail merchandise at service stations beliped lift sales. They can also confidently serval through daily inturcial prevers instead

through daily financial reports instead of having to wait for dated monthly information, Hewitt adds. Some of Valero's business divisions.

such as its whodesale marketing group, had daily drill-down capabilities before the conversion to WebFocus, Hewitt says. But because of data integrity problems among the various Bit systems in use at the time, the information abazys match what others were seeing, Walens's conversion to Webricos and bullens's conversion to Webricos and holped executives like Marvel Impure, saint access to more accurate special particles and the seed of the seed of the Dupuls is vice procedured of famous for the firm's Camadian marketing operations in Montreal Since he began using the Webricos tools in July, he has been able to self-through more deline profit and loss information for each of Valent's LOGI Certal and SPC common et al.

on one manager's spreadsheet didn't

service stations in Canada.

"Having detailed daily, weekly and monthly reports that we can generate and refresh ourselves allows us to react faster to the market and offer the best prices to our consumers."

praces to our consumers," says Dupuis. Since crude oil prices are constantly fluctuating, having current data allows him and other executives to more accurately calculate net profit and loss for gasotine, dised and other petroleum pushiers.

By standardizing on a single reporting tool, Valero executives can also compare information across the company's business units more consistently. That's a lot harder for firms with multicle Bit tools to null out

notes Gile.

Now that plant controllets at Valero's 18 refinestes are assembling similar capital expense reports, 'it's easier for me to do an

apples to apple comparison for capital expenditures) between refineries," says Loren Bates, Valero's assistant controller of refining accounting

HAL ZESCH.

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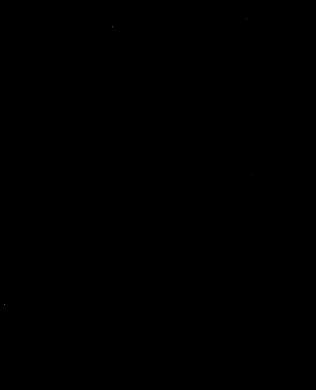
Videro hos prown by increasing its capacity to process heavy, sour crack-Than strategy included an st-permber's SB billion purchase of Premor Inc., an independent pertokum reiner and supplier. But unlike other congounts at 1996 ally above 20% of their acquisition savings through layoff and operational consolidation, Valero doesn't dismiss any workers it inherits. Therefore, says "Sech." we have to be Therefore, says "Sech." we have to be

very, very good at what we do."

That starts with having very good business intelligence.

#### CENTRAL INTELLIGENCE

Consolidated business intelligence suites make sense for large controlations but some users are mon comfertable with then Bi point tools. See page 27.



Valero Energy's business and IT smarts have made it one of the most profitable players in the oil field BY THOMAS HOFFMAN

IG OIL makes big money, but fore the rest of the market," says Gheit. not all big oil companies are the same Valero Energy Corp.'s status as one of the world's most profitable petrochemical companies is largely a result of its will ingness to buck the status quo and apply products profitably. a strong mix of business and IT savvy For years, executives at Valero have to strengthen its strategic decisionmaking and operational management Most oil companies refine light,

sweet crude oil, which contains from sulfors and metals and is cheaper to process than so-called heavy, sour crude oil, But 22 years ago, Valero executives predicted that as global oil consumption continued to rise, it would be well positioned if it could process heavy, sour crude. Though heavy, sour crude costs more to proc ess than premium oil, it is much cheaper to acquire and carries significantly higher profit margins.

As economic expansion in countries such as China and India has fueled increased global energy consumption. Valero's bet on heavy, sour crude "has placed it in the cathird's seat? says Fadel Gheit, an oil analyst at Oppenheimer & Co., a New York investment bank. That strategy has elevated Sao Antonio-based Valero from a relative unknown with just one refinery in 1997 to the bigsest oil refiner in the U.S.,

with 16 domestic and two international facilities. Valero which was named after the Alamo (whose official name was the Mission San Antonio de Valero), finds itself in this enviable position because it was "so quick to recognize the (heavy, sour

crude) trend - well be-

This has been a critical advantage for Valero, he notes, particularly in an industry that relies heavily on business intelligence (BI) to quickly sift through real-time market data to price energy

used BI tools to pore over daily, weekly and monthly reports from its SAP FRP system. The reports help them optimize profitability across the hundreds of crude oil, liquid propage and easoline products it sells in several thousand locations, says Hal Zesch, Valero's senior vice president of information

services and CIO "I don't know any other (energy) companies that have this depth of daily [views of profit and loss activities], and I've done a fair amount of checking," says Zesch

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require preventive maintenance. Such attention to detail has enabled Valero's refineries to run at roughly 92% of capacity around the clock says Zesch. That's in line with the rest of the U.S. oil industry, says Gheit, who places the industry's average refinery capacity at 90% to 93%. Still, Valero's focus on operational efficiency

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#### Fueled by Functionality

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functionality than they had before. says Hewitt, Managers can now drill down on line-item budget information to analyze, for example, whether a promotional campaign for retail merchandise at service stations beloed lift sales. They can also confidently scroll through daily financial reports instead of having to wait for dated monthly information, Hewitt adds.

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tional data than they could get before. Duouis is vice president of finance for the firm's Canadian marketing opera tions in Montreal. Since he began using the WebFocus tools in July, he has been able to sift through more detailed profit and loss information for each of Valero's L000 retail and 89 commercial service stations in Canada "Having detailed daily, weekly and

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oil prices are constantly fluctuating having current data allows him and other executives to more accurately calculate not profit and loss for easoline. diesel and other nerroleum

products By standardizing on a single reporting tool. also compare information across the company's business units more consistently That's a los

harder for firms with multiple BI tools to pull off, notes Gile Now that plant controllers at Valero's 16 refinerics are assembling similar

capital expense reports, "it's easier for me to do an apples-to-apples comparison (on capital expendi-

tures] between refineries," says Loren Bates, Valero's assistant controller of refining accounting Valero has grown by increasing its capacity to process heavy, sour crude That strategy included last Scotember's

HAL ZERCH

ENERGY

\$8 billion purchase of Premoor Inc., an independent petroleum refiner and supplier. But unlike other companies that typically achieve 30% to 70% of their acquisition savings through layoffs and operational consolidation, Valero doesn't dismiss any workers it inherits. Therefore, says Zesch, "we have to be very, very good at what we do," That starts with having very good business intelligence.

#### CENTRAL INTELLIGENCE

### IRM

#### i have control, i have a new IBM System 15

I control complexity. The one-of-a-kind System i5 is server, storage, software, database, and security, all in one

I control reliability. The System i5 platform helps keep you up and running so you can focus on your business, not your I.T.

i control flexibility. This uniquely customicable platform lets you run multiple operating systems (Windows; Linux; AIX 5L; and 5/057 simultaneously

i control my I.T. destiny. IBM Systems are a range of innovative servers and storage — like the System IS — designed to make your intrastructure and your file sympler



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within the IT department whose on I don't control. When I can't out ups to do the things I need on time, the or gets quite upset with me, and I'm ated that I can't tell him that it's

ant my fault. What can I do? A project manager's job is a gasket iob. You're often stuck between two or more hard, vibrating surfaces, and you need to keep them from fiving apart. This role requires flexibility and a bit of impermeability. So steel yourself, because I think you've got to develop a thicker skin on both sides of this

First, you've got to figure out whether your sponsor is really upset with you personally or just frustrated and unhanny with the state of the project. They are not the same thing. If your sponsor has a short temper or a volatile personality, it may be rather difficult

In the interest of developing thicker skin, it's generally best to distance yourself from your sponsor's apper, no matter where he directs it. He's not really mad at you anyway: he's mad at your job. The project manager of your project has failed to keep things on track. It's unlikely that he considers

you individually to be a bad person. Once you've stepped back from the heavy emotions, it's probably a bit easier for you to understand and identify

with his frustration. In fact, you can now feel entitled to a bit of your own frustration, a perfectly normal response to your inability to get others to support your project as you would like. Feel free to express your frustration and commiserate with your client without casting blame at

your colleagues. On the other side of thicker skin, I can't agree with your assumption that you are completely blameless in this situation. Part of a project manager's job is to coax, cajole, convince and even bully others to get done what needs to be done. If you haven't been

able to get the appropriate support, what have you done to get it? What more could you do? It's not in a project manager's job description to be the best-liked person

in the building. Sometimes managing. these sorts of conflicts can be unpleasant, but that's just part of the job. is there any parti

for a manager of technical restand what they do?

This is the exact opposite of the ques-tion that I'm usually asked. Ordinarily, I'm asked whether it's critically necessary that a manager understand more about the technology than the staff eather than understand less or nothing at all. But I think this is a fair and reasonshie mestion too

To some degree, it depends on what your role as supervisor is. If wou're a resource allocation man-

mer - someone whose job is to assign people to projects rather than to supervise their daily work - it's less important to understand than it would

he otherwise But Turill think that it's worth a resource manager's time to understand at least a bit. You'll be able to make better assignments and understand the technical career paths of the people for

whom you serve as traffic cop If you're a supervisor of the technical people, it becomes more important You have to know what they are doing in order to manage both the people and

At the same time, there are dangers associated with understanding too many of the details of the technology that people you supervise work on. Many managers want to try to do both the managerial job and the technical job at the same time. Generally, that's neither possible nor desirable

How do you doal with vice pres dents who tell you to cut 100 hours out of the project when you know it can't be done in that time frame and will

run ever It depends on your relationship with the vice president. If you've got a strong relationship and have the cred ibility to speak plainly, start out by telling him that it can't be done in the way that he wante

Then, whether or not you can speak plainly, it's time to pull out the old iron quadrilateral of IT projects (budget, schedule, feature set and quality) and

explain how it works. Let him know that you'd be happy to cut 100 hours out of the schedule, but then discuss which other priorities will have to be adjusted in order to accommodate the change. Feasibility permitting, be can have the choice of cutting product features or scope or sacrificing

If he complains that that's not good enough, tell him that you appreciate what he wants, but that your profes sional integrity prevents you from lying to him to avoid his displeasure. The truth of most of these situations is that you can't hire someone who can really do the project that much faster and cheaper; you can only hire someone who's willing to lie about it.

## READERS TALK BACK

More on Entering The Workforce

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Hi Paul, There over 30 years in IT. but I just completed my bechelor's in management. I think what surprised me about going back to school was the number of vater getting their degrees now. It aust shows that learning is lifelong. Why entening the worldorce for the first time. It is important to know when to keep your head down and when

to speak, Entry level employees need to be very observant and be Melong learners. I agree that school is important, but there is nothing like experience. New learners need to some day look back on their careers. with satisfaction, knowing that they were self-driven to succeed. The most important thing is to do what excites them. Never settle for the mundane - JRJ

Thanks for sharing your experience Congretulations on going back to school. It takes a lot of determination and is not as easy to fit into your life as an adult

I am a firm believer that the best Inarrung takes place at the intersecton of experience and theory. The more experience you have to bring to theory, the better able you are to make 4 meaningful and alive. Personally, I took one year off from college to work and deletely returned with a better sense of the use and meaning of

education. I can only imagine that with 30 years' experience to reflect on, you probably get a great deal out of your studies, and gute a bit more thun the teenagers in the next chair.

- Paul Blen Hi Paul As a graduating student,

there are many things that so through your mind while you are looking for that first job. As a graduating student with 30 years of experience, there were still many things traveling the caverns of my mind, but am certain they were different they those of the rookie. It is funny you say reaction," because it raminds me of Tom Harks at the end of the movie Contracty: When I was done with col. I had that same feeling.



Q&A

How did this partnership between Cisco and the NCWIT come about? Cisco is part of the NCWIT Worklance. In that min. Cross is worken hard to make sure that more arts and women are interested in careers in IT, in that reports, they wanted to do thus awonness campaign and we thought it was a natural partnership.

Any idea what percentage of the U.S. IT worldcroe is made up of women right new? It's about 29%, and it's on a downward trend. What's more elemeng is the drop in enrollment in computer science programs. down about \$996 (for mon and women) at U.S. colleges and universities. And only 15% of high school students are taking advanced placement tests in computer science. Some companies say they feel like they're OK today in terms of female participation in IT, but they don't expect to be OK in the fall as

What are seens steps that Cisco and the NCWIT clan to take to increase awarenees of career opportunities for women in FT? This awareness campaign is a really important first step. We're trying to get the word out to parents and educators that this is a worklerfully creative career. There's a perception that it's singular and greeky. But I know firsthand that it's an exciton and creative and socially relevant career. So we're sending out materials to parents and educators. That's an important first step. And there will be more. We really do need to mobilize parents to make there realize the importance of these career opportunities

\$106,326

### Side Effects

information security officer take a list when the CRSO starts reporting to someone cutsists that if Computations. Setting in continuous that in 30% of the client computation, the CRSO reports to a chief risk efficient, who is turn reports to the CRSO or the locard of directors. It makes things enable for the CRSO, but filerton carry that the continuous continuo

or more on security careers, see "Security Conversance," Feb. (3)

MOUNTE BANK INSTITUTE 2005 BASHEY OF A 260 BECUREY PROPERTURE AND APPROPERTURE THIS BALLARY FRANKE MOLINES DALARES FOR PERIOR TELES DADE BALLARY RAIN OFFICIAL GREET PRIVATE OFFICER, CHIEF REQUESTS OFFICER DESCRIPTOR OF RECORDER AND RECOVER WARRANTS.

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# What It Takes To Be **World-class**

typical companies? The Hackett Group defines several key differentiating

cs in its "Book of Numbers" research report, released this month World-class CIOs are far more likely to sit on the company's

Vorlé-class CIOs are much more likely to report to the CEO (71% of CIOs at world-class companies

compared with 20% at typical companes). Among typical companies, the most common reporting relationship is for the QO to report to the chief briangal officer (33%) Dely 14% at world-class CIOs report to the CFO

nies are more likely ers of the IT

reported for IT functions, 99h of typical organizations stiff use this approach, According to Hackett, contralization lets world class IT organizations coordinate their efforts more effectively while ensuring that IT goals mesh with those of the business. Hackett gathers its performance metrics.

Moreover while all world class IT arga-

nizations in the study have eliminated local

from 2,000 of the world's leading correct mes, including 90% of the businesses that make up the Dow Jones Industrial Average The receipth fern delines a world-class company as one that scores in the top quartile in both efficiency and effective ness performance metrics verified through

banchmarking studies A Seat at the Table where QIO sits on the primary

PAGE COMPILED BY JAMIE ECKLE



ORGANIZATION The National Center for Women & Information Tech-nology (HCWIT), Boulder, Colo.

How did this partnership between Corn and the NCWIT come about?

Arry idea what percentage of the U.S. IT workforce is made up of women right now? https://doi.org/ and her of Many was some a factor

der to any 1 to be DR or the Armer

What are some steps that Cisco and the NCWIT plan to take to increase awareness of career opportunities for women m (17 has supply a supply to the same representative and William System and the

Career prospects for security professionals who report to a short enformation security officer take a list when the CISO starts reporting to someone outside the IT organization Cartner Inc. estimates that in 30% of its client companies, the CISO moorts. to a chief risk officer, who in turn reports to the CEO or the board of directors. It makes things easier for the CISO, but Gartner says his direct reports end up with restricted opportunities to move up within the larger IT organization and little in the way of career develop

(For more on security careers are "Security Convergence." Feb. 131

#### Bridges Is New CIO At Delta Airlines

SHIRLEY W. BRUDGES has been appointed CRI of all been appointed CRI of the Air Lines inc. and president and EEO of Delta Exchanology, the air/line's wholly owned IT subsidiary. A 16-year veteran of Atlanta-based Delta, Bridges was most recombinated to peraling officer at Delta Exchanology. Perviously, the was vice precident of air/line operations systems.

#### Chinese Web Search Firm Taps Liu as CTO Belds.com Inc., a Belling based

Chinese-harquage Internet search provides, has prometed JERRY LUI to chief technology efforce. Liu was Baldu's first earpleyes in 2000 and bocames vice president of engineering later that year. Providently, he was an associate professor of technolery at Parking University, where his team developed the first Chiment forces are acceptant.

#### Domino's Delivers McGlothlin as ClO

Donaino's Pizza Inc., in Ann Arbor, Mich., announced the appointment of CHRISTOPHER K. McOLOTHLIN as essentive vice president and CIO. He will report to Cheirman and CEO David A. Branden. McGliethin land

old A. Brandon, McGlethlin had worked at Louisville, Ky.-based hum Brands lec. saloce 1995, nost recently as vice president of operations technology. Previsally, he was senior director of um restaurant excellence and irrector of KFC finance/strategic

#### U.K.-based Hotelier

Names First CIO
Inter-Centionstal Notes Occup
PLG in Windows, England, has
appointed TOM COMOPP' in the
newly created position of CIO.
Comply, who will report directly
to CEO Andrew Countert and air
on the associative accessibles, was
most recently CTO of Starwood Notes & Respect to
Notes that has been senter vice and the season of the sentence of the compression of the compression for etrategic architecture at Safety and

RARBARA GOMOLSKI

# Confessions of a Full-Time Telecommuter

iHRTEEN YEARS AGO. I embarked on a personal and professional adventure when I accepted a job in the Boston area while living in California, with the intention of community full time. The forward-thinking company that hired me (which happens to publish this newspaper) recognized that it could hire

publish this newspaper) recognized that it could hire the best people if it cast its hiring net nationally. Now, of course, telecommuting is a norm and a perk that many IT professionals have come to expect. Still, it's

not a given in all companies.

Based on more than a decade of experience, here are my observations and suggestions about telecommuting, some of which may surprise you: For self-motivated employees, telecommuting means a productiv-

ity boost. Focused and dedicated individuals will get far more work done at home than in an office.

Telecommuting improves job satisfaction and loyalty for employees who want to do it and are well

suited to the arrangement.

Some employees will prefer to come to the office because home is not conducive to work. The key is to have the flexibility to support the differing work styles of various employees.

work styles of various employees.

Organizations that fail to allow flexible work arrangements will find it increasingly difficult to attract the best candidates.

■ In some organizations, telecommuters face limited promotion opportunities because "managers" must work in an office. If you are building a virtual organization, the same opportunities should be open to everyone. It's marful to the company if selecommuters are relegated to certain jobs by virtue of where they work.

■ It's impossible to "check up" on

- it s impossione to circle up till



telecommuters, and you shouldn't even try. If you don't rust people and you don't feel conflicted that you can measure their pool and measure their performance, don't allow telecommuting. Don't call telecommuting as if a.m. or it put in the set of they are people have different work styles. Some may like to get into the office of set hours carly but take a two-hour lanch, as long as they are

available when they need to he, he satisfied. Focus on outcomes, not work styles, a New employees who telecommute should be assigned mentors to help them navigate issues that are unique to telecommuters, such as connecting

from home.

Companies are saving a bunch of money on office space as a result of relecommuting. As working from home becomes more widespread, employees will expect to be compensated for the costs of running their home offices. Today, companies typically pay

for things like phones and high-speed Internet connections, but not utility costs or rent. Expect that to change in the next 10 years.

The ideal arrangement is to have the employee come to the office at least one day a week, so that the individual can develop ao understanding of the

can accesso à o underettanding of the company and as processes. company and as processes, company and as processes that those that expect workers to come to an office every day. The fieldbilly of electronmuting requires more rigor in the area of business processes. For example, impromptu meetings are just about impossible in a virtual work covironment, or planned meetings and formal procyers of the company of the company of the proposition of the company of the open of the company of the proposition of proposition of

\*\*Organizations can feel confident about telecommuters' performance, provided the performance metrics are well defined and tracked. Many employees who telecommute have performance goals that are quite tangible — almost quotallike.

almost quotalike.
 Companies with flexible telecommuting policies tend to develop a more diverse workforce, which is good for business.

\*\*Organizations that depend on a high degree of collaboration among employees must support telecommuters with the right tools and technologies. In the early days, we used Internet e-mail, and we uploaded text files using pcAnywhere. Today, of course, the technology is much more advanced for supporting virtual collaboration.

■ Telecommuting should be considered a privilege, not a right. Too many companies have applied a blanket approach, allowing everyone the same telecommuting status. The truth is that not all employees are self-motivated or honest.

Use it

In the early days of telecommuting, I was an evangedist. Now I'm a bit more pragmatic about it, I other main, telecommuting is a win-win for employees and employers. However, it also presents unique challenges that some organizations are simply not prepared to face. 8

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#### Fusion

future with the number Since the buyout Oracle executives have eaid that customore will not be formed to move from their installed applications to Busine The integrated suite will be developed using input gleaned through organizations such as the Quest International Users Group and the Oracle Applica-

tions User Group, they said. In addition, a spokesman said last week that Oracle executives will soon take to the road in a program to solicit customer feedback and answer questions about Fusion

#### Holding Back

Despite the efforts to reach out to users, the creation of a detailed Fusion road map is happening at a "glacial rate," said Robert Robinson, a business systems supervisor at Durr

There is no guestion that PeopleSoft and J.D. Edwards customers are better off than they were a year ago. JOHN MATELSKI, DEPUTY CIO.

CITY OF ORNANDO Systems Inc. The Plymouth Mich-based automotive euro

plier uses I.D. Edwards ERP applications Robinson said he plans to study early adopters' use of the technology before decidinv whether to upgrade to

Englan Many customers are concerned about the size and complexity of the planned Fusion suite, which will incor porate parts of Oracle's various applications, noted Dave Richards, CIO at Great Falls Mont.-based Pacific Steel & Recycling Inc., which runs I.D.

"There are still many questions about costs, support. technology and migration noths that have not to be answered," Richards said. John Schindler, CIO at

PennleSoft Enterprise shop Kichler Lighting Co., a lighting fixtures maker in Cleveland, estimated that it will take another 12 months to accurately assess the merits of the acquisition.

Schindler said that in the meantime he is getting "neryous" about Fusion. "It is too early, so for now I'll take a wait-and-see approach." he

added Five of the customers interocally upheat about the deal. even with the questions sur-

viewed said they are unequivrounding Fusion. For example, Oracle's decision to create a lifetime basic support policy for most of its applications and to continue undating the LD. Edwards and BoonleSoft lines impressed John Matelski.

#### Keeping the Base

president of Quest and denuty CIO for the city of Orlando, a PeopleSoft shop.

"There is no question that PeopleSoft and LD. Edwards customers are better off than they were a year ago," he said. David Dobrin, an analyst at consultancy B2B Analysts

plans for Fusion \*Oracle doesn't seem to be seriously addressing the natural concerns of people that have to make a decision about Fusion \* he noted Meanwhile, Oracle rival SAP AG said that user up. certainty over the merger in

Inc. in Cambridge, Mass., said

that much of Oracle's installed

have is concerned about the

seneral and Fusion in particular has helped it pick up 200 former Oracle customers over the nast year. Most of the defectors had been PeopleSoft accounts, according to an SAP snokessyman Ich Dasteel, Oracle vice

president of global customer programs, downplayed any defections to SAP as statistically neelioible

Moreover, he noted that since the merger, Oracle has worked to collaborate with the user groups and has regularly reached out to inform customers of its plans.

#### Continued from page 1 Web Services

terprisewide approach to SOA

governance. Thomson Learning has about 10 registries, including stand-alone offerings from vendors like LogicLibrary Inc. and Systinet Corp. and registries packaged with anplications from Microsoft Corp. and SAP AG. Thomson also uses several Web services management and security tools. Crowburst said

In addition, the number of Web services in production at Thomson Learning has quadrupled over the past year, he said. One business unit alone has created more than 50 services over the past year. The company has 44 business

units, Crowhurst said. Today, Thomson Learning creates and enforces policies to govern Web services by manipulating the interfaces

Data About Metadata

Edwards' OneWorld XF

of its XML gateways, applica-

tion servers and other services' endpoints he said To ease that process, Crowhurst said, he is searching for

technology that can create and enforce Web services policies through the entire life cycle of a service, from design to runtime

"There are very few tools capable of managing policy that way, and none capable of enforcing policy that way" he said

Crowburst said that although all of the Web services vendors his company works with position their tools as the backbone for governance, none is up to the task we The standards effort led by

SOA Software was promoted by users who are increasingly demanding that management and policy products work with multiple registries, according to Ian Goldsmith, vice president of product marketing at the Santa Monica, Calif-based company, SOA Software currently requires that customers

use its proprietary registry. Goldsmith said that several vendors will join in the standards effort, but he declined to identify any of them. Miko Marsumura vice president of marketing and

technology standards at Infravio Inc. in Cupertino, Calif. confirmed last week that his company plans to endorse the standards effort. Infravio is a provider of registries and SOA provernance tools At the same time the UDDI

partners are disclosed SOA Software will unveil "registry independent" versions of its Service Manager Web services management product, its XML VPN product, and the technology that it acquired late last year from Merrill Lynch & Co.

#### for exposing legacy data within an SOA, Goldsmith said. Help With HIPAA

American Fidelity Assurance Co. is testing Software AG's new Crossvision suite of tools with an XML-based application that it built to send and receive information from partners and users who comply with standards in the Health Insurance Portability and Accountability Act (HIPAA), said Jim Lupton, vice president and director of systems management at the Oklahoma City-based insur-

ance company Lupton said he hopes the updated tool set can provide a centralized store for metadata so users won't have to call IT to get information about services related policies. The company is a longtime user of older Software AG registry and repository products.

Ron Schmelzer, an analyst at ZapThink LLC, said users have been seeking SOA governance tools to create and enforce policies to ensure that their burgeoning stables of Web services comply with HIPAA. the Sarbanes-Oxley Act and other regulations.

"Most of SOA is not in the code," he said. "It is in the metadata and the policies."

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# Common Insecurity

HAT do people who renew their driver's licenses. buy hard liquor or donate to a home for elderly and disabled veterans have in common? In New Hampshire, people who did any of those things within the past six months may have had their credit card numbers stolen because of computer security issues.

No, there hasn't been a rash of hacker attacks or virus outbreaks. All three groups are potential victims of a single piece of malware found earlier this month on one state-owned server (see story, page 23).

How it got there is now under investigation. Why all those different victims ended up on one server is a different problem.

According to the New Hampshire Office of Information Technology, the compromised machine was one of the state government's smaller servers. But it was used by the Division of Motor Vehicles for processing payments by credit or debit card. And by the state Liouar Commission as a backup system for processing sales at stateowned liquor stores. And for collecting donations to support the New Hampshire Veterans Home

It's not hard to figure out how they got lumped together on the same box. That's what IT consolidation is all about, isn't it? Three separate, unrelated agencies had a similar need; processine credit card transactions. There was enough spare capacity on the DMV's server to handle the Liquor Commission's overflow and to pick up the small number of donations to the Veterans Home

Why buy two extra servers? It must have seemed like a good, frugal idea at the time. It was only data, after all. On the server. why shouldn't drinking and driving mix? And the consolidation worked fine - as long

as nothing went wrong. But with nothing separating the three sets of transactions, a single security breach turned into a three-fer. It's hard to fault the state IT people

for their response. They knew they were stretched ton thin oo security, which is why they were testing an automated intrusion-detection tool. That's how the Cain & Abel program, which can capture credit card numbers, was discovered

And once it was found, they acted. Potential victims were notified. The FBI was called in. The infected server was carted away for forensis analysis. One IT employee was put on paid leave, though the state won't vet say why.

What they couldn't do was turn back the clock and do their consolidation differently so that, even if the server was breached, they'd be contacting

victims from only one agency - not three Look, consolidation isn't just an attractive option; it's inevitable. IT hardware just keeps getting cheaper, and the human cost of administering it keeps going up. It only makes sense to reduce the number of boxes and fill up unused

capacity io our data centers. But it can't be done casually or haphazardly. Maybe consolidation isn't exactly the enemy of security, but it poses real security challenees. Simply shoveling different processes or data sets into unused server capacity means we lose the physical separation that provides an important lawer of security

Yes, that's convenient. It's budget friendly. But it's not enfo

The more we can segregate our processes - the more locked doors we can put between one running process and another - the harder it becomes for an intruder to have free access, and the easier it is to keep things secure.

In networks, we can use subners to separate processes and contain problems. Oo servers, we can use virtualization. That's more complicated and expensive than just piling thiogs in together. But it's the kind of "defense in depth" that we need today to protect customer and corporate information from saboteurs. intruders and worms

And in the face of IT consolidation and never-ending security threats, it's the only way to make sure that customers who are driving drinking or donating have a lot less in common a

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